DOCUMENT RESUME

ED 221 170 IR 010 341

TITLE	Cooperative Catalog Conversion Study. Final Report.
INSTITUTION	Peat, Marwick, Mitchell and Co., Washington, D.C.
SPONS AGENCY	Department of Health, Education, and Welfare, Washington, D.C.; Minnesota State Dept. of Education, St. Paul.
PUB DATE	Sep 81
NOTE	357p.; Performed through the Six Minnesota Regional Library Systems Catalog Study Advisory Group.
EDRS PRICE	MF01/PC15 Plus Postage.
DESCRIPTORS	Cataloging; Computer Output Microfilm; *Costs; *Library Catalogs; Library Cooperation; *Library Networks; Library Personnel; Library Services; Online Systems; *Public Libraries; Regional Programs; *Specifications; Tables (Data)
IDENTIFIERS	*Catalog Conversion; Mini MARC; *Minnesota; OCLC; Vendors

ABSTRACT

Cost estimates provided by cataloging vendors during January 1981 are analyzed to identify the costs of catalog conversion options and alternatives to the card catalog for six Minnesota regional library systems. Following an executive summary of the study is a discussion of its background, scope, objectives, data gathering methodology, and analytical approach. The activities and alternatives associated with library catalog conversion (including catalog and file maintenance, current cataloging, retrospective conversion, and library cooperation) are examined and the non-personnel costs of cataloging alternatives (retaining the present system, developing an online or computer output microform system, or the use of OCLC or Mini MARC data) are outlined. Personnel costs are then reviewed, with discussions of present cataloging methods, the productivity of alternatives, and staffing requirements. A comparison of total costs, a consideration of collective versus individual actions, and a summary of study recommendations are presented, and the tasks involved in conversion planning are described. Specific conversion costs for the Crow River, East Central, Kitchigami, Northwest, Lake Agassiz, and Viking Library Systems, and for a six-region cooperative, are outlined. A request for bids for a microform catalog and a comprehensive set of cost tables accompany the text. (JL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

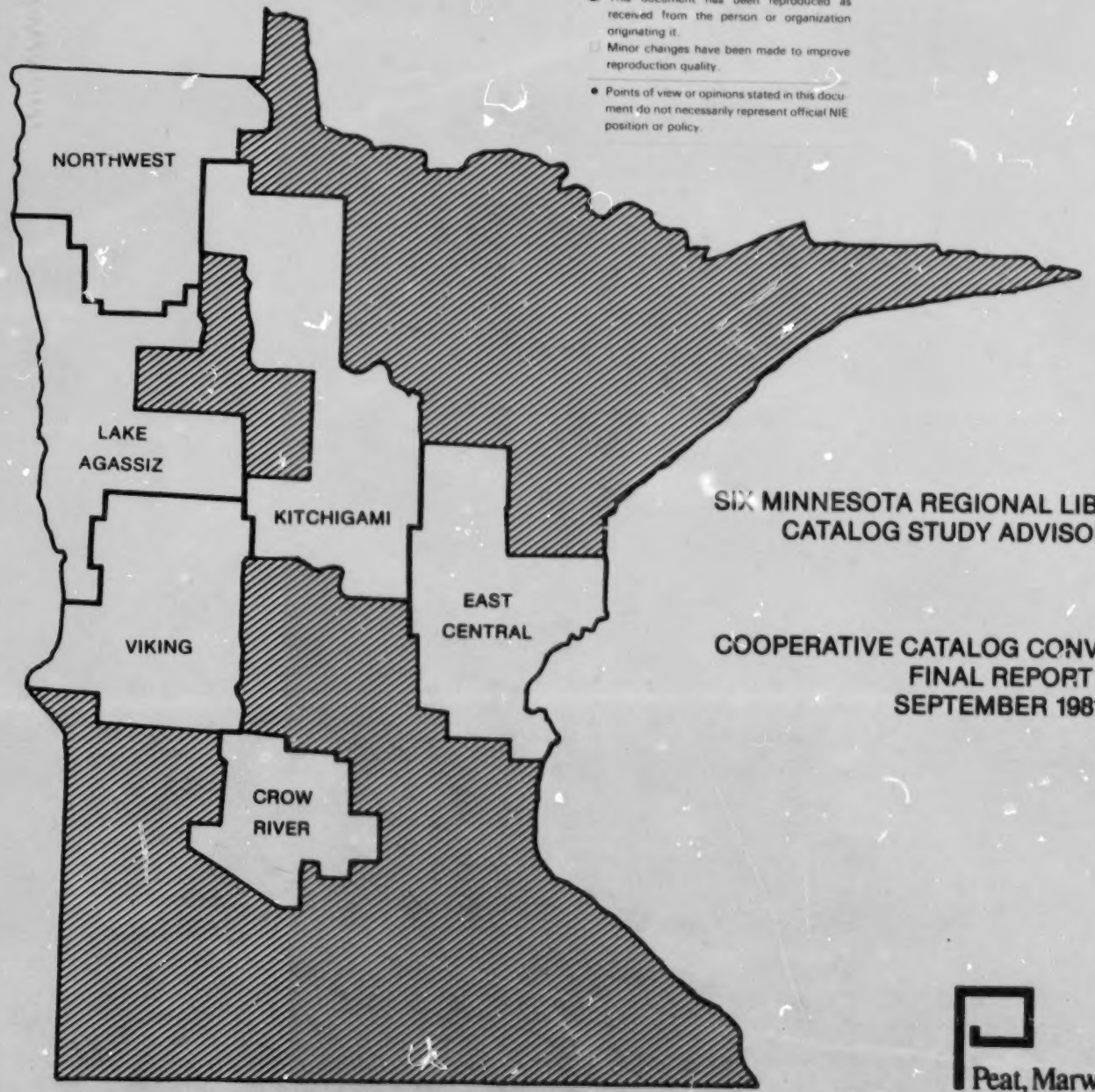
ED221170

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.



SIX MINNESOTA REGIONAL LIBRARY SYSTEMS CATALOG STUDY ADVISORY GROUP

COOPERATIVE CATALOG CONVERSION STUDY
FINAL REPORT
SEPTEMBER 1981

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

William G. Asp

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Peat, Marwick, Mitchell & Co.

IR010341

November 16, 1981

TO: THE SIX MINNESOTA REGIONAL
LIBRARY SYSTEMS

Ladies and Gentlemen:

Peat, Marwick, Mitchell & Co. is pleased to present the final report of the Cooperative Catalog Conversion Study. All revisions made in response to your comments are included. The resulting document is one of the most thorough studies of cataloging costs and alternatives that we have seen. We hope that you find it useful as you pursue subsequent phases of your conversion projects.

For your information, your copies include the detail section for your region but not for other regions.

We appreciate your assistance in this project and look forward to working with you in the future.

Very truly yours,

Peat, Marwick, Mitchell & Co.

Preface

This study examines cataloging costs, conversion options, and alternatives to the card catalog for six Minnesota regional library systems. As such, the data collected and presented here reflects the activities in these six library systems. Thus, the results of this analysis should not be used to draw conclusions for other libraries.

The analysis presented here is based on vendor-provided cost estimates at one point in time, January 1981. Vendor prices and capabilities do change with time and thus it is important to identify current costs for all vendors.

The distinguishing feature of this comprehensive analysis is that it identifies all costs components, including labor, equipment, services, software and supplies. The same process of identifying all costs can be used as a model by any library as an aid in structuring an analysis for considering alternative forms of the catalog. An analysis based upon this approch must use operations statistics, current prices, objectives and priorities for the library in question to yield valid and appropriate conclusions.

The contents of this study were developed under a grant from Library Srevices and Construction Act, Title I funds, by the Minnesota Department of Education and the U.S. Department of Health, Education and Welfare. However, the contents do not necessarily represent the policy of either agency and have not been endorsed by either agency.

We would like to express our appreciation for the assistance of all the participants in this study, including:

Wayne Alveby, Project Administrator, Northwest Regional Library
William Asp, Director, Office of Public Libraries and Interlibrary Cooperation (OPLIC)
David Barton, Director, Vicking Library System
Cheryl Bjorn, Director, East Central Regional Library
Barbara Caron, Former Director, Viking Library System
Lon Dickerson, Director, Lake Agassiz Regional Library
Marlys O'Brian, Director, Ditchigami Regional Library
Burton Sundberg, Director, Crow River Regional Library

and to acknowledge the consultants:

Joseph Matthews, Matthews and Associates
David Sheldon, PMM&Co.
Kathryn Wolf, PMM&Co.
Raymond Williams, PMM&Co.

CATALOG STUDY ADVISORY GROUP
Catalog Conversion Study

Table of Contents

		Page
	EXECUTIVE SUMMARY	
	INTRODUCTION	
	• Background	1
	• Study, Scope and Objectives	2
	• Data Gathering	3
	• Structure for the Analysis	4
I.	ACTIVITIES AND ALTERNATIVES	
	• Library Catalog and File Maintenance	I-1
	• Current Cataloguing	I-6
	• Retrospective Conversion	I-9
	• Combined Options for Individual Regional Libraries	I-13
	• Cooperative Actions Among Regional Libraries	I-14
II.	NON-PERSONNEL COSTS OF ALTERNATIVES	
	• Present Method	II-1
	• On-Line Catalog	II-3
	• COM Catalog	II-7
	• OCLC, Inc.	II-12
	• MINI MARC	II-17
III.	PERSONNEL COSTS	
	• Present Method	III-1
	• Productivity of Alternatives	III-4
	• Staffing Requirements and Costs	III-6

Table of Contents, Continued

		Page
IV.	EVALUATION AND CONCLUSIONS	
	• Comparison of Total Costs	IV-1
	• Cooperative vs. Individual Actions	IV-3
	• Comparison of the Alternatives	IV-4
	• Summary of Recommendations	IV-4
V.	CONVERSION PLANNING	
	• Preliminary Tasks	V-1
	• Coordination of Retrospective Conversion	V-4
	• Vendor Evaluation and Selection	V-5
VI.	CROW RIVER	
VII.	EAST CENTRAL	
VIII.	KITCHIGAMI	
IX.	NORTHWEST	
X.	LAKE AGASSIZ	
XI.	VIKING	
XII.	SIX REGION COOPERATIVE	
	APPENDIX A - Request For Bids For a COM Microfiche Catalog	

EXECUTIVE SUMMARY

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this document we have included relevant background data, conclusions and recommendations resulting from all phases of study.

The study was organized by the following six regional systems in Minnesota:

1. Crow River Regional Library
2. East Central Regional Library
3. Kitchigami Regional Library
4. Lake Agassiz Regional Library
5. Northwest Regional Library
6. Viking Library System

They were assisted by the Office of Public Library and Interlibrary Cooperation (OPLIC).

Currently, the regional library systems maintain card files for their catalogs, self list, locator files and on-order files. All provide centralized technical processing services to their members except in the viking Library System, where member libraries perform their own technical processing. None of the libraries use OCLC, Inc.'s cataloging system, nor do they obtain machine readable catalog records from other sources.

There is a need to improve the quality and accessibility of the catalogs to all library agencies in each region. Within these libraries, the creation and maintenance of the library card catalog and its related manual files, e.g., the shelf list, locator file, and on-order file, is labor-intensive and expensive. Most of the libraries can afford only one copy of the union catalog for the entire region, maintained at the regional headquarters. Kitchigami has none; Crow River has three. We found the quality of the existing card catalogs to be relatively poor, reflecting inconsistent cataloging following a variety of catalog rules. The quality of card catalogs tends to deteriorate overtime, making it difficult for patrons to find what they want in the card catalogs.

New forms of the catalog, maintained through machine readable catalog records offer substantial service benefits and increases in efficiency, partly through quality and partly through providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A book catalog
- A Computer Output Microform or CCM catalog
- An online catalog, supported by a computer and accessible through compter terminals.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilites and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (on-line, COM and card forms) vs. current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine readable form for the purposes of equal access from all locations to the materials held in each individual region.

To meet these objectives, we performed the following tasks during the course of the study:

- Reviewed the priorities of the catalog and study objectives.
- Examined current cataloging processes and costs.
- Identified relevant conversion and bibliographic processing alternatives and considerations.
- Estimated costs of alternative catalog forms (card, COM and on-line) for each library system.
- Evaluated conversion and cataloging alternatives based on costs and other considerations.

- Outlined a conversion plan and next steps.
- Identified potential funding sources and potential vendors.
- Prepared a final report.

As a result of this study we are recommending that the Regional Library Systems convert to catalogs in machine readable form by methods that provide a reasonable trade-off of cost and quality.

Our cost analysis evaluated personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high. After the initial effort to convert the existing catalogs to machine readable form, the personnel effort required to maintain the catalogs, and to use the catalogs would be substantially reduced. The cost estimates and savings considered in this report only represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements or savings in using machine readable catalogs.

Specific recommendations and cost estimates are given in separate sections of the report for each region. Highlights of the comparison and conclusions reached include:

Catalog Form -

In our opinion, the most attractive alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large agencies, with COM catalogs in the other branch libraries or agencies. We recommend that some the regions defer the on-line catalog for several years due to its high cost and apply their limited resources to creating a COM catalog.

Current Cataloging -

The needs and priorities of the six regional library systems are best satisfied by current cataloging through OCLC, Inc. We rate MINI MARC next in terms of benefits. Cataloging through a COM vendor is rated third in terms of benefits, but its low cost makes it the recommended choice for some of the regions.

Retrospective Conversion -

Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. For regions using OCLC for current cataloging, we recommend OCLC for retrospective conversion. For regions using a COM vendor for current cataloging, we recommend using MINI MARC for retrospective conversion.

See Exhibit IV-3 (page IV-11) for specific recommendations for each regional library system.

Conversion of catalogs to machine readable form is a major project requiring one to two years to complete. The major preliminary tasks to be completed include:

- Choosing between OCLC and a COM vendor for current cataloging.
- Fund raising at the national, state and local levels.
- Contracting for retrospective conversion services from OCLC or MINI MARC.
- Weeding old materials from the collections and the catalogs.
- Project planning and coordination with other regional library systems and with the Minnesota Multi-County, Multi-Type Regions.

Vendor evaluation and selection for COM catalogs and online catalogs can be initiated after the retrospective conversion is well underway, due to the length of time required for conversion.

We recommend that the regions focus on individual actions using the alternatives and schedule best suited to them, giving cooperative efforts a secondary priority. Our cost analysis indicates that there would be significant cost savings from multi-region cooperative actions. However, there are trade-offs which mitigate the benefits depending on the activity in question. Each region is facing a different set of circumstances and local needs that affect the choice and timing of catalog conversion alternatives. Furthermore, a majority of funding is expected to be from local sources.

We hope that the report will be a helpful guide and reference for the six regional libraries and others in the library community.

INTRODUCTION

BACKGROUND

The Catalog Study Advisory Group (CSAG) organized this study to represent the needs of the following six regional library systems:

1. Crow River Regional Library
2. East Central Regional Library
3. Kitchigami Regional Library
4. Lake Agassiz Regional Library
5. Northwest Regional Library
6. Viking Library System

These systems serve mainly rural communities over a large geographic area.

All provide centralized technical processing services to their members except the Viking Library System, where libraries provide their own technical processing. None of the libraries in these systems use OCLC, Inc.'s cataloging services, nor do they have machine-readable records from other sources.

The six regional library systems are seeking cost-effective alternatives to support the following desired priorities of the catalog:

- Multiple access points to individual regional union catalogs with location records in entries;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

These desirable service improvements are dependent upon conversion of catalog records and holdings into machine-readable form and on the continued production of machine-readable catalog records.

STUDY SCOPE AND OBJECTIVES

Given the current status of the six regional library systems, it was most appropriate for the six regional libraries to begin with this study of cataloging costs, conversion alternatives and catalog forms. Based on our experience, we have seen significant interdependencies among:

- the choice of the catalog's physical form;
- the choice of cataloging method for current materials; and
- the choice of retrospective conversion method.

Accordingly, this study had the following objectives:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) restrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) vs. current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

To meet these objectives, the study included the following tasks:

- Review the priorities of the catalog and study objectives.

- Examine current cataloging processes and costs.

- Identify relevant conversion and bibliographic processing alternatives and considerations.

- Estimate costs of alternative catalog forms (card, COM and online) for each library system.
- Evaluate conversion and cataloging alternatives based on costs and other considerations.
- Outline a conversion plan and next steps.
- Identify potential funding sources and potential vendors.
- Prepare a final report.

DATA GATHERING

Our conclusions and recommendations are based upon an extensive data gathering and analysis effort. Our data gathering activities included:

- development and distribution of questionnaires on current cataloging methods and costs to the six regional libraries;
- on-site visits to all of the headquarters operations and to the three largest agencies now performing cataloging with the Viking Library System;
- preparation and distribution of a Request for Information to vendors of cataloging products and services;
- referencing prior studies, articles and reports prepared by PMM&Co. and others;
- telephone contacts with vendors and users of alternative cataloging products and services; and
- discussions with the directors of the regional libraries.

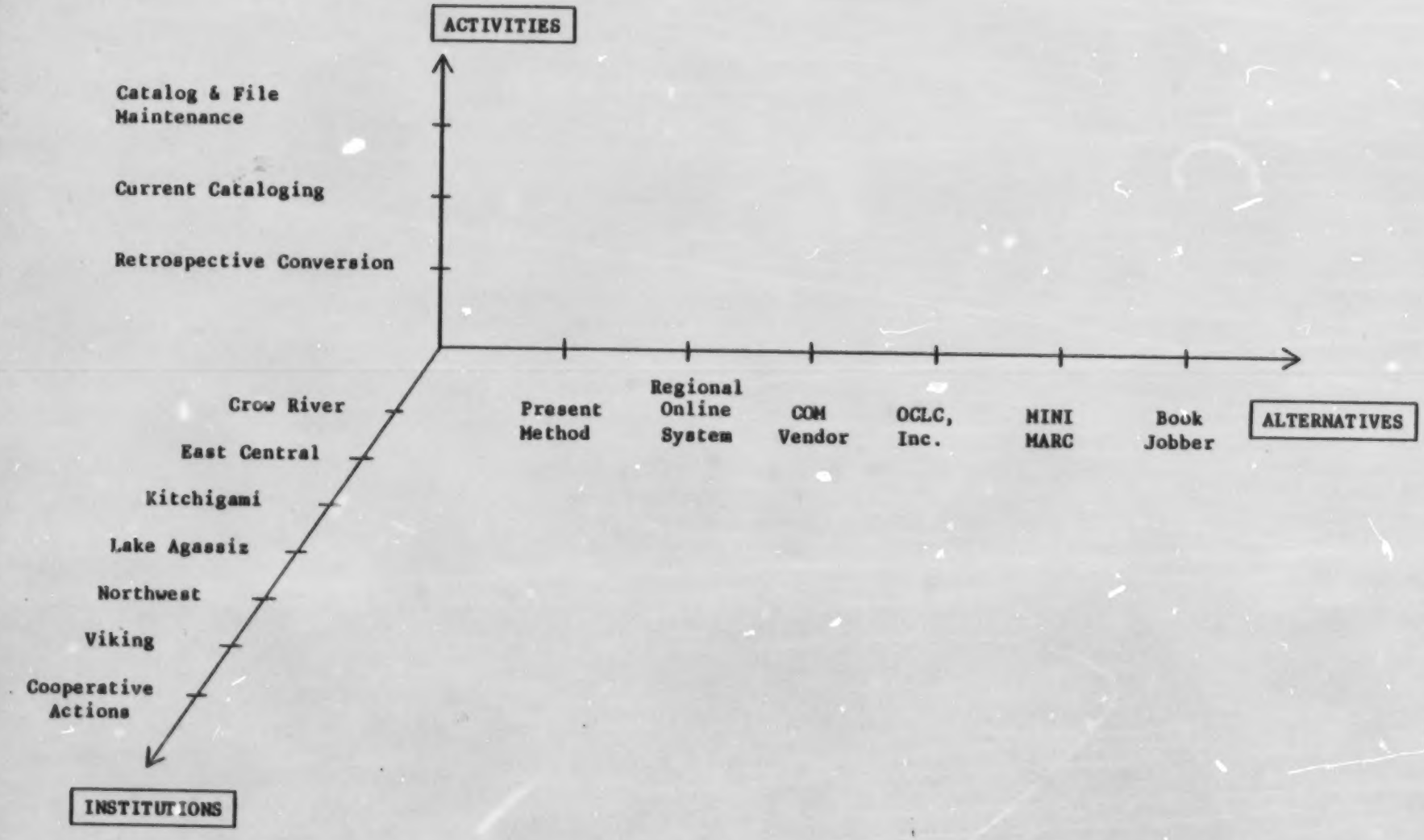
STRUCTURE FOR THE ANALYSIS

In developing a structure for defining and evaluating the alternatives, we recognized three dimensions or variables as illustrated in Exhibit 1.

Our analysis was structured to account for possible complications such as the following:

- An alternative may not support all of the needed activities.
- The best approach may require a combination of the alternatives.
- Use of the same alternative for two or three activities generally results in a cost saving.
- The best and most cost-effective approach for each institution may be different from those of other institutions.
- The best approach for a cooperative action may be different from the best approaches for regions acting independently.

Exhibit 1
Dimensions of the Analysis



I. ACTIVITIES AND ALTERNATIVES

THE LIBRARY CATALOG AND FILE MAINTENANCE ACTIVITIES

Within a library, the creation and maintenance of a library card catalog and its related manual files, e.g., the shelf list, locator file and the on-order file, is labor-intensive and expensive. As a result, most libraries can afford only one union catalog for their entire system. This has caused a number of libraries to re-examine the role and implications of the traditional card catalog, and has forced some of these libraries to consider and implement "alternative catalogs". Possible alternative catalogs include:

- a book catalog;
- a Computer Output Microform or COM catalog; and
- an online catalog, sometimes referred to as an online patron access catalog.

These offer substantial service benefits and possible increases in efficiency, partly by providing access to a region-wide union catalog in every branch of the system.

The quality of the existing card catalogs in the six Minnesota regional library systems can best be characterized as poor. The catalog cards reflect inconsistent cataloging following a variety of cataloging rules. The net result for the library card catalog user is a catalog use success rate that continues to decline with time. A catalog use success rate may be defined as the success of the patron in finding what the patron wants in the library owning the desired title.

The alternative forms of the catalog with data in machine-readable form allows the catalog to accurately and consistently reflect the library's holdings.

The Catalogs and Related Files

The following points highlight the status of the catalogs and related files in the six regional libraries:

- In all cases, bibliographic control of books is achieved with card files.

CATALOG STUDY ADVISORY GROUP

Summary of Catalogs
(As of 11/80)

Library or System	Estimated Number of Card Drawers in Use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On Order File	Volumes	Titles	Volumes	Titles
Crow River	654	-	153	108	5	184,469	106,991	1,200	700
East Central	183	-	120	48	2	104,327	80,000(1)	250	200
Kitchigami	403	24	124	117	3	78,298	50,000(1)	915	701
Lake Agassiz	375	204	125	-	12	222,768	75,000(1)	N/A	N/A
Northwest	286	-	107	-	1	100,061	60,000(1)	N/A	500
Viking	307	132	114	5	3	188,393	75,000(2)	N/A	N/A
Total	2,111	457	743	276	26	878,316	446,991	2,365	2,101

Note:

(1) Estimated number of titles.
(2) Estimated number of titles owned by VLS Headquarters and all members.

- Non-book materials are typically controlled in other ways, although there are several card files which catalog recordings.

- In two systems, shelf lists serve as locator files. In all other systems, two separate files are used.

- The cataloged holdings of the six systems total nearly one million volumes. There are relatively few uncataloged holdings.

- Serials are not cataloged in any system and are therefore excluded from these totals.

- Data on the number of cataloged and uncataloged items is expressed in estimated number of titles based on number of volumes.

- No system has significant backlogs of material awaiting processing.

- In all cases, uncataloged volumes consist of materials in one of the following categories:

  - non-book materials,
  - gifts materials which have very low priority for processing, and
  - retrospective collections held by small agencies.

- In all systems most catalog content and cards are obtained from outside vendors:

  - material jobbers such as Baker & Taylor and Brodart, and
  - cataloging jobbers such as Catalog Card Corporation.

Catalog Alternatives

Book Catalogs, because of their continuing high costs to produce cumulative catalogs, have been dismissed by a majority of librarians. The best known book catalogs are produced by the New York Public Library and the Hennepin County Library. Costs for book catalogs vary with the size of the data base, number of copies produced, frequency of cumulations and supplements, quality of print paper and binding, plain paper copying versus offset printing, and line printer output or photocomposition of the book catalog.

COM Catalogs, whether in microfiche (a 4" x 6" sheet of film) or roll of film format, is a form of the catalog for which there is a fair amount of experience. The costs are predictable and there a number of vendors that can provide a quality product although as more libraries convert to COM catalogs, some vendors are experiencing processing backlogs which translate into delays in receiving a new edition of the catalog. Costs for COM catalogs vary with the size of the data base, the frequency of cumulations, and the number of copies produced. In our experience, supplements to a COM catalog are often ignored by both patrons and librarians in libraries. Therefore, we recommend that supplements to a COM catalog not be produced, and we have estimated costs accordingly. One clear advantage of a COM catalog is that additional copies of the catalog may be prepared for a slight increase in cost and distributed to all branches within the regional libraries for use by staff and patrons. The major disadvantage is the necessary delay from the time a book is received to the time when it appears in the next issue of the COM catalog, several months later.

Online Catalogs, have the potential for providing ready access to the catalog from any location, using many access points and powerful search commands. The online catalog terminals can be disbursed throughout the library (which is particularly appealing for multi-story), or linked via telephone lines to branch or member libraries. Should dial-up telephone access be provided to the catalog, the public would have access to the library's data base from their homes or businesses (it is estimated that one out of ten U.S. homes has a microcomputer or terminal). The online catalog may or may not be linked to an automated circulation control system. The obvious advantage of such a link is that when the patron finds a title of interest in the catalog, the status of the item, (i.e., on the shelf, checked out, on order, etc.) is also provided to the patron.

For the purpose of this analysis it is assumed that an online catalog only reflects the holdings of one region. While a six or more regional online catalog is feasible, the continuing high costs of communication lines from the computer to all the terminals located in the six regions present a significant barrier.

Our cost estimates for an online catalog reflect the computer processing capacity to handle both circulation and an online catalog, although the costs for the circulation terminals have been excluded from the analysis. The cost reductions from elimination of the card catalog and other manually maintained files help to offset the costs of an online catalog computer system. The benefits of an automated circulation system can be significant and include:

- reduced costs for producing overdue notices;
- increased control over the loaned collection (overdue notices are sent on time);
- decline in the number of lost books; and
- identification of delinquent patrons at the time of check-out.

The specific level of benefits arising from an automated circulation control system should be determined by each regional library system since such an activity is beyond the scope of this study.

Exhibit I-1 presents major points in a comparison of catalog alternatives and their features. The online catalog can provide access to more than bibliographic records of a library's holdings. Data about a community, e.g., census data, and its social, fraternal, and social service organizations can be stored in the computer and made available to the patron via the online catalog. The libraries within a region share resources through a program called interlibrary loan or ILL. Requests for a particular item are usually made on paper forms which are mailed or sent via the courier delivery service. This process could be speeded up significantly if the computer facilitated or switched the ILL request from the requesting library to the resource library. Similarly, routine correspondence and memos among libraries in a region could be accomplished with the same computer with substantial service improvements. This latter activity is usually called electronic mail.

Another option discussed was to have an online catalog, shelf list and locator file accessible only at the region headquarters, and a regional COM catalog with copies accessible at the branches. As materials are received, short records would be entered into the on line catalog pending receipt of full records from the COM vendor. This concept was suggested to avoid the costs of online catalog terminals and a telecommunications network linking the branches with the headquarters library. It also provides COM as backup to the online system and for access from bookmobiles.

The online catalog may or may not be linked to an automated circulation system. There are two options for linking;

- a headquarters only circulation/locator system which checks books in and out of branches, bookmobiles, in process , on order, or to patrons of the headquarters library. There would not be any circulation terminals in the branches.

- a region wide circulation system with circulation terminals in all branches.

The second option will not be considered further because it requires a telecommunications network for circulation, so that eliminating online catalog terminals in the branches would not eliminate the network and its attendant costs.

The system would be used by library headquarters staff for reference, interlibrary loan and locating materials, and it would be used by patrons of the headquarters library. Because it would have only a few terminals attached and does not support branch activity the computer equipment requirements would be significantly reduced. However, the reduction is less than proportional due to the many fixed costs of purchase, installation and maintenance of the computer system.

Key Points and Assumptions

Based on our understanding of your needs and the available alternatives, we focused the study by making the following assumptions:

- The catalog or its related files may be accessible only to library staff in the technical services area, to all library staff, or to the library patron - the public. We have assumed that the catalog would be accessible to both the public and library staff.

- Due to the continuing high production costs, book catalogs have been excluded from consideration in this analysis. Thus, the two forms of access to the machine-readable data base subjected to a thorough analysis are COM and on line catalogs.

- The machine readable record is assumed to be compatible with the full MARC II (Machine Readable Cataloging) format for either the COM or online catalog.

Exhibit I-2
Cataloging Alternatives
Important Features

	COM Vendor	OCLC	MINI MARC	Book Jobber
Current Cataloging				
Time Delay of Cataloging				
- for editing	2-6 weeks	None	None	None
- for receipt of machine readable record	1-8 weeks	1-8 weeks	None	1-4 weeks
Location of Source Data Base	Vendor	Vendor	Library	Book Jobber
Authority Control File	Yes	No	No	No
Cross References Contained in Authority File	Yes	No	No	Not provided
Time received, edited and modified	Batch	Online	Online	No editing
Data Base				
• MARC	Yes	Yes	Yes	Yes
• Other	Yes	Yes	No	CIP
• Shared Cataloging	No	Yes	No	No

General Conclusions

COM catalogs and online catalogs are attractive alternatives to the traditional card catalogs. The precise costs and benefits that may be experienced by each of the six Minnesota regional library systems are determined in following sections of this report. Since some of the options for current cataloging preclude other choices for retrospective conversion, each are separately considered first, then the appropriate combinations of the alternatives are considered.

CURRENT CATALOGING

There are four options for obtaining machine-readable records of current cataloging. They include:

- a COM vendor
- a book jobber
- a bibliographic utility, such as OCLC
- MINI MARC

Exhibit I-2 identifies important features of the cataloging alternatives. General comments on each are given in this section.

COM Vendor

A COM vendor maintains an extensive data base of records in addition to those MARC II records made available through the Library of Congress MARC Distribution Service. A library indicates those items that have been received at the library and a machine-readable record for the title is added to the library's data base. For those items for which no machine-readable record may be found, the library must provide the correct bibliographic information to the COM vendor in a prescribed format - either an OCR typed sheet or a microcomputer floppy diskette. In addition to the new records which are added to the data base, the library has the ability to modify, change and delete existing records in "their" data base due to changing locations, cataloging errors, and withdrawals of titles from the collection. The attractiveness of this option is the relatively inexpensive start-up costs associated with a COM catalog. The continuing costs

are related to the number of titles added and the method of inputting search arguments and bibliographic information. For this analysis we have estimated costs based on having twelve (12), twenty (20) or thirty (30) copies of the catalog cumulated twice a year, depending on the region. This means that the data in the catalog may be from one month to seven months out of date, depending on when the catalog was last produced. Both the personnel and non-personnel costs associated with a COM catalog for each regional library have been estimated and are presented in subsequent sections. For a COM catalog, the primary personnel savings are in the area of catalog maintenance.

Book Jobber

In general, a book jobber is an inappropriate source of current cataloging for the production of a COM catalog since the record can be obtained from the COM vendor for about the same price and the COM vendor will charge an additional fee for accepting a book jobber record and inputting and integrating the record into the COM vendor's files.

For an online catalog, the book jobber may be an appropriate source of machine-readable records for current cataloging if the library can live with some limitations. The book jobbers will supply a magnetic tape of machine readable records on a monthly basis. The records received may or may not be closely related to the recently received items from the jobber and the records can not be edited. The book jobber can only supply the library with either CIP or MARC records since they have no access to shared cataloging records. Since the costs of acquiring records on a tape from a book jobber are similar to those for a COM vendor, we did not develop separate cost estimates for this option. It should be noted however that some book jobbers also provide COM catalog products.

OCLC, Inc.

OCLC, Inc. provides its shared cataloging service in the State of Minnesota through MINITEX, which coordinates activities within the state. Its features and advantages include:

- provision of selected catalog records on catalog cards and/or on magnetic tape;
- a large data base and many active users in Minnesota assure that a high proportion of records requested are found on the data base - we estimate a hit rate of 95% can be expected for the six regional library systems;

- inclusion of your holdings in the OCLC data base which would be accessible to other regions and other types of libraries in the State;
- direct access to the holdings of other OCLC user libraries in the State; and
- online mode of cataloging and record searching.

MINI MARC

MINI MARC offers a different approach to cataloging support. Its key features include:

- a microcomputer console installed at the library or processing center;
- a copy of the MARC data base (1967 to present) stored on 800 to 900 diskettes at the library, with monthly updates;
- a COM index to the MARC data base;
- on-line editing and input facilities;
- automatic entry of fixed field information tailored to each library or installation;
- a dial-up interface with the RLIN data base to search for non-MARC records;
- console response time of less than one second for editing, searching and filing operations; and
- ability to print card sets, labels, etc. at the library on the same day the book is received.

MINI MARC, a turnkey packaged system, is characterized by a high fixed cost and initial investment (approximately $45,000) and a significant fixed cost for on going support, independent of the number of

titles cataloged. There is no per title charge. Thus, there is a definite cost advantage if the MINI MARC console can be used heavily. With a two or three-shift operating schedule, we estimate that a single console could convert up to 100,000 titles per year for the six regional libraries under study. If it is only used for on going cataloging, without retrospective conversion, it would be too expensive relative to the other alternatives for the six regional libraries.

RETROSPECTIVE CONVERSION

There are four alternatives for completing retrospective conversion:

- a COM vendor
- OCLC
- MINI MARC
- obtaining a "borrowed" data base from another library and loading it into the online catalog system.

An additional alternative exists:

- submitting a photocopy of the library's shelf list to a vendor (often the vendor is located overseas) for data entry (keypunch) into machine-readable form.

This latter alternative is not recommended because: 1) the number of errors are usually greater than 5-10%; 2) the difficulties in dealing with a vendor that may be located some distance from the library; and 3) the machine readable records being created would merely duplicate the existing poor quality cataloging which was created over a number of years following a variety of cataloging rules.

In addition, the library would either delay any retrospective conversion activities until after the on-line catalog computer system had been installed, or focus retrospective conversion activities in those areas of the collection likely to be unique, e.g., Minnesota regional and local history.

COM Catalog Vendors

The COM catalog vendors often offer an extensive data base to facilitate retrospective conversion. This data base includes Library of Congress MARC records plus the original cataloging records input by their

other customers. The hit rates experienced by other libraries during a retrospective conversion project, while influenced by the type and size of library and its collection characteristics, have been reasonable. Some public libraries have experienced hit rates as high as 90%. The hit rate will depend upon the choice of COM vendor. The process of obtaining the machine-readable records during a retrospective conversion project is exactly the same as used for current cataloguing. A search argument is sent to the COM vendor for searching their large data base, and when a unique match is found the record is put in the library's data base. Three reports are returned to the library:

- a report lists all the search arguments which retrieved no records - i. e., non-hits;
- a report listing those search arguments which retrieved multiple records - the library then gets to choose and/or modify the most appropriate record; and
- a listing of all the records retrieved in either title or shelf list sequence for data verification and editing purposes.

Obviously, sending a COM vendor a short search argument, up to 100 characters, and receiving a full MARC record, average record size of 550 characters, is more cost-effective and produces a higher quality data base than entering or keying all 550 characters for each title in a library's collection. COM vendors charge as little as $.10 or $.25 per title entered or found for retrospective conversion.

The use of a COM vendor for retrospective conversion can be a viable alternative and is included in our detailed analysis.

OCLC, Inc has special arrangements and rates for retrospective conversion projects. Retrospective conversion, however, is a secondary service provided to libraries who perform ongoing cataloging through OCLC's bibliographic system. For retrospective conversion, the approach is similar in several ways.

- OCLC terminals are used.
- Searching and editing are performed on line.
- Similar commands and capabilities are available.
- A tape copy of the data base is available.

The retrospective conversion differs from current cataloging in several ways.

- Cards cannot be produced for retrospective records.
- The rates per title are:
  - $.65 per title, peak hours (until 4 p.m. Minnesota time)
  - $.05 per title, off peak hours

  versus $1.36 per title for current cataloging First Time Uses (FTU's).
- User procedures should be changed to take advantage of off-peak rates. For example, retrospective searching and editing may be done during the day as long as updates are deferred to off-peak hours to qualify for the lower per title rate.

OCLC's large data base is available, which makes this option especially attractive for libraries with unusual non-MARC or pre-MARC (prior to 1967 titles). The University of Minnesota reports a 95% hit rate for parts of its retrospective conversion project. Typically, the hit rate public libraries experience average between 95% - 98%. The hit rate will be lower for titles with older imprint dates.

Given this favorable information, OCLC retrospective conversion was included in our detailed analysis.

The MINI MARC system described in the previous section can be used as a retrospective conversion tool as well as for current cataloging. MINI MARC provides the following positive points:

- Availability of the full Library of Congress MARC data base 1967 to present on floppy diskettes;
- Online mode of operation of searching (on a single diskette) for record editing and for record entry;
- High productivity and fast response time available on the local minicomputer;
- Access to the RLIN data base for non-MARC titles;
- One console for each region provides adequate capacity;

- Ability to perform single pass editing and update for a record during any hour of the day without per title charges; and

- The console can be rented for one year, then returned.

MINI MARC has the following demerits for the six regional libraries.

- Pre-1967 imprints are not available on MINI MARC.

- RLIN's data base is not as extensive as OCLC's at this time and would probably lack local Minnesota history and state specific works. We would expect improvement when the University of Minnesota becomes an active RLIN user (scheduled for July, 1981) and transfers their catalog records to RLIN.

- A multi-shift schedule is required to make the most cost-effective use of the MINI MARC console.

Other library systems are using MINI MARC in conjunction with online catalogs, COM catalogs and card catalogs, and are now using MINI MARC for data base "clean-up" and retrospective conversion projects.

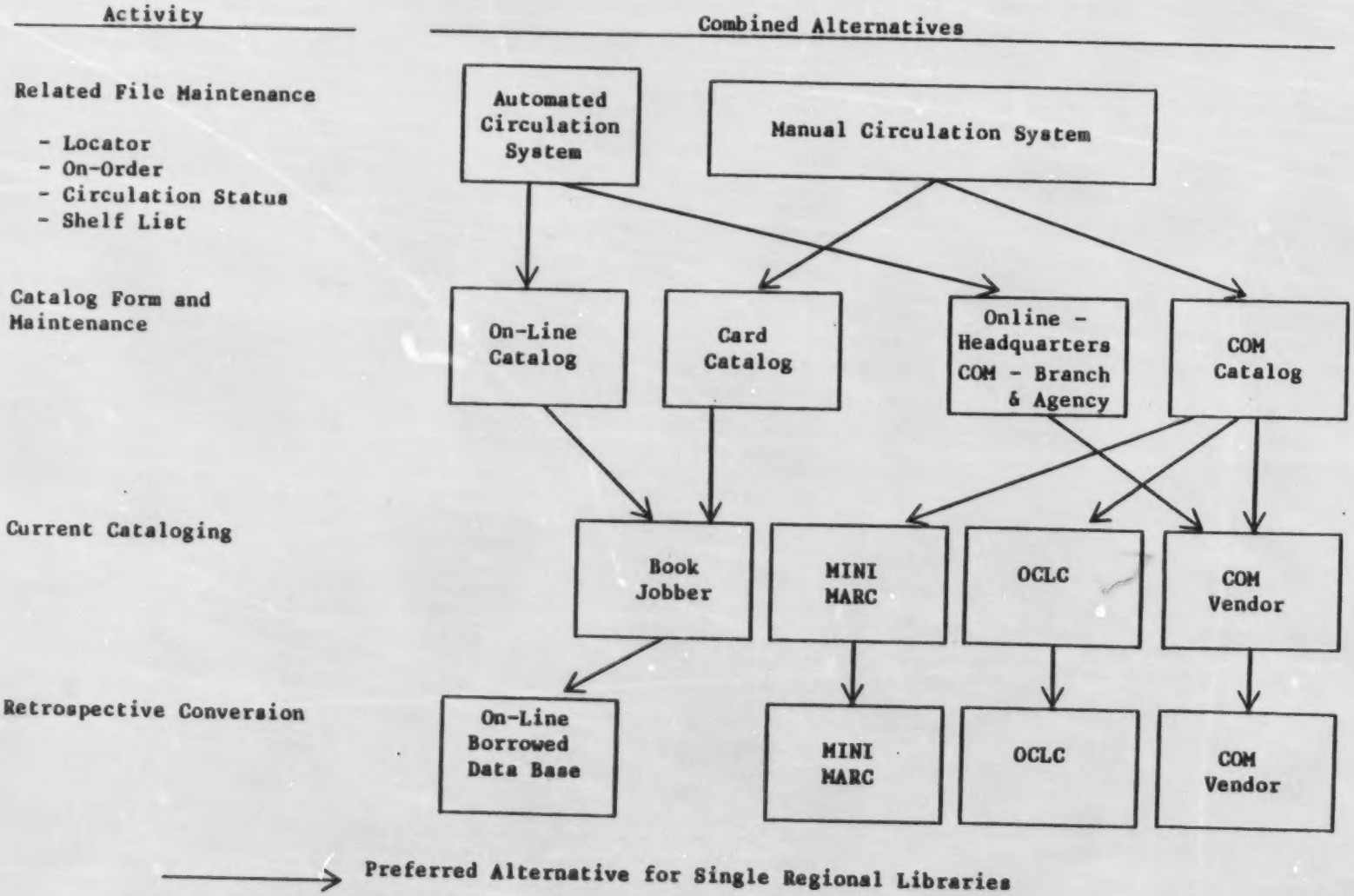
We concluded that MINI MARC is a viable alternative for retrospective conversion to be included in the detail analysis.

Borrowing Another Library's Data Base

While this option is only for the regions that would install an online catalog/circulation system in the near future it is a viable alternative. A number of Minnesota libraries have completed retrospective conversion for either a COM catalog or for an automated circulation system. A machine readable data base could be "borrowed" from one of these libraries and loaded into an online catalog/circulation system. Once loaded, inquires are made for a desired title and if found, a bar code label number holding symbols and other item specific information is linked to the appropriate title record in the computer. This approach has the potential of providing 50% to 60% of the records needed, depending on data base content and quality.

However, not all items in a library's collection will be found in the "borrowed" data base. Thus, the library must either enter original cataloging records in their own on line catalog/circulation system or

Exhibit I-4
Examples of Combined Options
For Single Regional Libraries



find another source of machine readable records, e.g., OCLC, MINI MARC or a COM catalog vendor. The labor required to search for titles in the borrowed data base is comparable to the labor required to search other sources. The service charges for records from other sources would be reduced proportionately to the percent of titles found in the borrowed data base.

General Conclusions

The four alternatives, MINI MARC, OCLC, Inc. a COM vendor, and borrowing another library's data base, are considered viable options for retrospective conversion in conjunction with a COM or online catalog and are included in the detailed analysis.

COMBINED OPTIONS FOR INDIVIDUAL REGIONS

There are advantages to using the same alternative for more than one activity. For example, using MINI MARC for both retrospective conversion and current cataloging would eliminate some duplicate or redundant cost items. The most important case of this is the discount given by some COM vendors when COM catalog production is combined with current cataloging. This package approach is the preferred combination for any of the six regions acting autonomously in implementing a COM catalog. See Exhibit I-4 where the solid lines indicate combined options.

With an online catalog in these regional libraries, book jobbers can be the most cost-effective and convenient source of current cataloging information where they provide 80% or more the needed catalog records. This is true for all except Crow River and Kitchigami. Retrospective conversion can be initiated by use of a "borrowed" data base loaded into the online catalog system. A hit rate of 50% to 60% may be expected. Records not found would then be requested from other sources (COM vendors, MINI MARC, etc.).

COOPERATIVE ACTIONS

Minnesota has formed multi-type library regions to provide a structure for cooperative actions within the state. Four of the regional libraries, Northwest, Lake Agassiz, Kitchigami and Viking are in the same multi-type region. Cooperation within the respective multi-type regions, including work with the academic libraries, may be the most appropriate approach for funding and operating subsequent automation projects.

This study focuses on cooperative actions among the six regional libraries. Cooperation may include some or all of the following:

- collective purchasing and evaluations;
- a processing center;
- a joint computer center; and
- a multi-region union catalog.

Collective purchasing and evaluations will be beneficial regardless of the option selected, but these benefits are not large enough to override other considerations in choosing an alternative.

A processing center spreads the fixed costs associated with equipment and personnel necessary for cataloging and preparing items for circulation over a greater number of libraries and those costs should be lower on a per item basis. A processing center may qualify for a larger discount from the book jobber by combining orders from several libraries. However, the local library does lose some control over the timing and flow of materials through the processing center. Depending upon the source and quality of cataloging, a processing center may take more time to process an item than it currently takes a regional library system.

A processing center is the most efficient way to use MINI MARC and OCLC for ongoing cataloging. It would have less value for a retrospective conversion effort because each region could fully utilize an OCLC terminal or a MINI MARC catalog with its own work. To realize benefits from a processing center for retrospective conversion special procedures are needed, such as merging card shelf lists from the six regions so that titles held in several regions would be searched for only once.

A joint computer center for an online catalog/circulation system would help to spread the large fixed costs across several regions. Our detailed cost analysis includes this option as an example even though only one or two regions foresee having the resources to support an on line system in the near future.

Non-personnel costs for a multi-region union COM catalog are estimated to be $55,000 to $60,000 initially, plus $50,000 per year. The Directors of the participating regional libraries view this as a supplement to regional COM or online catalogs, not a replacement. However, it is included in our detailed cost analysis as an illustration of the potential cost savings, if the regions used a multi-region union COM catalog as a substitute for individual regional COM catalogs. Similar cooperative actions could be taken within the multi-type regions.

II. NON-PERSONNEL COSTS

PRESENT METHODS

Presently, the regional libraries rely upon manual processing and card sets obtained from book jobbers. Non-personnel costs include:

- Card kits;
- Card sets;
- Card stock;
- Copy machines used for card duplication;
- Order forms; and
- Supplies.

These represent an average of 16% of total cataloging costs reported. See the Exhibit II-1 on the following page, Total Cataloging Costs - 1979.

Exhibit II-1

Total Cataloging and Catalog Maintenance Costs, 1979

	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Total
Non-Personnel Cost							
Cataloging	$ 4,725	1,841	320	9,838	843	3,810	21,377
Catalog Maintenance	900	-	-	-	-	-	900
Locator File Maintenance	200	32	-	-	-	-	232
Shelf List Maintenance	300	-	-	-	-	-	300
On-Order File Maintenance	200	147	202	-	-	-	549
Total Non-Personnel Cost	$ 6,325	2,020	522	9,838	843	3,810	23,358
Personnel Cost							
Cataloging	$ 9,322	6,301	12,155	1,577	5,304	17,539	52,208
Catalog Maintenance	10,675	3,595	738	7,376	877	8,249	31,510
Locator File Maintenance	4,709	3,987	589	7,513	-	880	17,678
Shelf List Maintenance	12,744	920	185	1,047	109	3,502	18,507
On-Order File Maintenance	2,985	3,544	-	1,047	322	2,194	10,092
Total Personnel Cost	$ 40,435	18,347	13,667	18,560	6,612	32,364	132,038
Total Cost	$ 46,760	20,367	14,189	28,398	7,455	36,620	155,396
Volumes Added	7,867	6,144	5,504	18,468	2,375	12,428	52,786
Cost Per Volume	$5.94	$3.31	$2.58	$1.54	$3.14	$2.94	$2.94

ONLINE CATALOG COSTS

Online catalog non-personnel costs include costs for:

- Computer equipment;
- Software;
- Terminals;
- Communications costs;
- Supplies;
- Maintenance; and
- Installation charges and expenses.

See Exhibits II-2 and II-3.

We have estimated the non-personnel costs of an online catalog in each region. As the basis for our estimates, we assumed that a commercially available circulation/online catalog system would be used with a separate installation in each region. The cost of circulation terminals is shown as an additional cost. In the following exhibits, basic costs are included under Online Catalog and File Maintenance.

Costs of a multi-region cooperative installation were estimated assuming:

- a single installation serving all regions;
- title overlap of 50% reducing the size of the data base;
- additional communications costs necessary;
- use of a large commercially available computer system.

Our estimates indicate that participation in a multi-region cooperative would reduce initial non-personnel costs by 50% with all six regional libraries participating, and ongoing costs would be reduced by 30%, as compared with separate installations for each region.

The estimated costs represent the minimum configuration and number of terminals needed to provide access to reference staff (excluding some of the smallest branches) with only limited access to the online catalog for patrons. Additional computer equipment and terminals would be required to support full patron access through online catalog terminals.

Exhibit II-2
Online Catalog
Quantity Estimates

	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Six Regions Total	Six Region Cooperative Combined
Catalog and File Maintenance								
Installations	1	1	1	1	1	1	6	1 or 2
Computer Equipment and Configuration	1	1	1	1	1	1	6	1 or 2
Catalog Terminals	16	14	8	12	7	10	67	67
Physical Locations	16	11	7	11	7	10	62	62
Titles in Data Base	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496(1)
Annual Titles	4,563	3,101	3,514	6,218	1,424	6,206	25,026	12,513
Branch Connections; Terminals on:								
- Leased Telephone Line	10	9	6	7	6	9	47	62
- Dial-in Telephone Line	5	1	1	3	0	0	13	3
- Direct/Local Lines	1	4	1	2	1	1	7	2
Circulation								
Computer Equipment Upgrade	1	1	1	1	1	1	6	1
Circulation Terminals	13	16	10	13	9	13	74	74
Charge/ Cir. 1979	415,518	418,530	317,420	608,691	225,790	656,601	2,642,550	2,642,550

Note (1): Adjusted for an estimated 50% title overlap among the six regions.

Exhibit II-3
Non-Personnel Costs Estimate
Online Catalog

	Unit Cost		Crow River			East Central			Kitchigami			Lake Agassiz		
	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual
Online Catalog and File Maint.														
Computer equipment	Depends upon region			$ 180,000.00	11,000.00		$ 172,000.00	10,500.00		$ 170,000.00	9,500.00		$ 176,000.00	9,900.00
Services/software	45,000.00	10,800.00	1	45,000.00	10,800.00	1	45,000.00	10,800.00	1	45,000.00	10,800.00	1	45,000.00	10,800.00
Supplies	Depends upon region			10,000.00	500.00		10,000.00	500.00		8,000.00	300.00		15,000.00	1,000.00
Terminals	2,500.00	400.00	16	40,000.00	6,400.00	14	35,000.00	5,600.00	8	20,000.00	3,200.00	12	30,000.00	4,800.00
Branches - leased line	400.00	1,230.00	10	4,000.00	12,300.00	9	825.00	11,070.00	6	2,400.00	7,380.00	7	2,800.00	8,610.00
Branches - dial-in lines	325.00	630.00	5	1,625.00	3,150.00	1	325.00	650.00	1	325.00	650.00	3	975.00	1,890.00
Miscellaneous (1)	25,000.00		1	25,000.00	-	1	25,000.00	-	1	25,000.00	-	1	25,000.00	-
Total				305,625.00	44,150.00		290,925.00	39,120.00		270,725.00	31,830.00		294,775.00	37,000.00
Circulation - Additional Costs														
Computer equipment upgrade	50,000.00	5,000.00	1	50,000.00	5,000.00	1	50,000.00	5,000.00	1	50,000.00	5,000.00	1	50,000.00	5,000.00
Terminals	3,500.00	450.00	13	45,500.00	5,850 00	16	56,000.00	7,200.00	10	35,500.00	4,500.00	13	45,500.00	5,850.00
Total additional				95,500.00	10,850.00		106,000.00	12,200.00		85,000.00	9,500.00		95,500.00	10,850.00

Notes:

(1) Includes site preparation for power, air conditioning, facilities, and implementation assistance from the vendor or consultants.

Exhibit II-3 (cont'd.)
Non-Personnel Costs Estimate
Online Catalog

	Northwest			Viking			Total - Six Separate Regions			Total - Six Region Cooperative(2)		
	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual
Online Catalog and File Maint.												
Computer equipment		$ 160,000.00	9,000.00		$ 180,000.00	11,000.00		$ 1,038,000.00	60,900.00	1	$ 350,000.00	30,000.00
Services/Software	1	45,000.00	10,800.00	1	45,000.00	10,800.00	1	270,000.00	64,800.00		100,000.00	20,000.00
Supplies		6,000.00	150.00		10,000.00	600.00		59,000.00	3,150.00		30,000.00	1,500.00
Terminals	7	17,500.00	2,800.00	10	25,000.00	4,000.00	67	167,500.00	26,800.00		167,000.00	26,800.00
Branches - leased line	6	2,400.00	7,380.00	9	3,600.00	11,070.00	47	18,800.00	57,810.00		24,000.00	76,260.00
Branches - dial-in lines	-	-	-	-	-	-	13	4,225.00	8,190.00		975.00	1,890.00
Miscellaneous	1	25,000.00	-	1	25,000.00	-	7	150,000.00	-		75,000.00	-
Total		255,900.00	30,130.00		288,600.00	37,470.00		1,686,875.00	219,550.00		748,000.00	156,450.00
Circulation - Additional Costs												
Computer equipment upgrade	1	50,000.00	5,000.00	1	50,000.00	5,000.00	6	300,000.00	30,000.00		250,000.00	25,000.00
Circulation terminals	9	31,500.00	4,050.00	13	45,500.00	5,850.00	74	259,000.00	33,300.00		259,000.00	73,000.00
Total		$ 81,500.00	9,050.00		$ 95,500.00	10,850.00		$ 559,000.00	66,300.00		$ 509,000.00	58,000.00

Notes:

(2) Costs for one computer system serving all regions.

COM CATALOG COSTS

Estimated non-personnel COM catalog costs include:

- Two cumulations per year without supplements;
- COM Fiche Readers;
- Per title charges;
- Copy tape charges;
- Charges for the COM Master;
- Charges for 12 or 20 or 30 COM copies as required;
- Supplies; and
- Software for the communication terminals.

See Exhibits II-4 and II-5 for quantities and costs estimated for COM cataloging. First, costs were estimated for each activity (Catalog and File Maintenance, Current Catalog, Retrospective Conversion) as if each was performed as a separate operation. Then Net Combined Costs were estimated assuming that cataloging, retrospective conversion and COM catalog production are performed by the same COM vendor.

Cost of a Six Region Cooperative effort assumes:

- A six region union COM catalog is produced with 120 copies;
- Each region continues to carry out its own cataloging using the communications terminals to enter data on diskettes;
- The cost of software is shared by the regions;
- A title overlap of 50% is assumed and costs are reduced accordingly;
- Holding symbols for each of the six regions would be included; and
- All regions receive copies of the union catalog and do not have individual COM catalogs.

We have used the Brodart 1980 price list as a source for our cost estimates throughout this report. Other COM vendors may be more expensive as price and quality varies among vendors. Note that costs for two cumulations annually are comparable to one cumulation and quarterly cumulative supplements. We also compared costs with Autographics. Their initial costs were 15-20% higher, but ongoing costs for two cumulations annually were comparable with Brodart's. Autographics would recommend four cumulations annually with proportionaterly higher annual non-personnel costs. Personnel costs are approximately the same regardless of the number of cumulations annually.

Exhibit II-4
Quantities Estimated
COM Vendor

	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Total	Six Region Cooperative
Catalog and File Maintenance								
Total titles	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496(1)
COM readers	20	20	12	[illegible]	12	20	114	114
Cumulations	2	2	2	-	2	2	2	2
Copies	20	20	12	30	12	20	114	114
Annual titles	4,563	3,101	3,514	6,218	1,424	6,206	25,026	25,026
Current Cataloging								
Annual titles	4,563	3,101	3,514	6,218	1,424	6,206	25,026	12,514(1)
Titles per terminal hour (Avg)	42	42	42	42	42	42	42	21(2)
No. of copy tapes	2	2	2	2	2	2	12	12
No. of installations	1	1	1	1	1	1	6	6
No. of software for Communication terminals	1	1	1	1	1	1	6	1
Terminal hours per week	2.0	3.0	1.6	2.8	.7	2.8	12.9	12.9
Terminals - additional	0	0	0	0	0	0	0	0
Retrospective Conversion								
Total titles	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496(1)
Titles per terminal hour (Avg)	55	55	55	55	55	55	55	27.5(2)
No. of copy tapes	6	6	6	6	6	6	36	36
No. of installations	1	1	1	1	1	1	6	6
No. of software for Communication terminals	1	1	1	1	1	1	6	1
Terminal hours per week	0	0	0	0	0	0	0	0
Terminals - additional								

Notes:

(1) Adjusted for assumed 50% title overlap among the six regions.
(2) Fewer titles per terminal are assumed for cooperative processing because duplicate titles must still be searched and noted in a local holdings field.

Exhibit II-5
Non-Personnel Cost Estimates for a COM Catalog
Cataloging from a COM Vendor

	Unit Cost		Crow River			East Central		
	Initial	Annual	Quantity	Initial	Annual	Quantity	Initial	Annual
Catalog and File Maintenance								
Title input from tape - Annual		.07	4,563	$ -	320	3,101	$ -	217
Title input from tape - Initial	.07		106,991	7,490		80,000	5,600	
Master catalogue with								
12 copies, 2 cumulations; or		.1214						
20 copies, 2 cumulations		.1264	106,991		13,524	80,000		10,112
30 copies, 2 cumulations		.1327						
COM fiche readers	200.00	20.00	20	4,000	400	20	4,000	400
Total				11,490	14,244		9,600	10,729
Current Cataloging								
Annual titles		.24	4,563	-	1,095	3,101	-	744
Installations (training and supplies)	1,300.00		1	1,300	-	1	1,300	
Software(1)	6,000.00		1	6,000	-	1	6,000	
Copy tapes	25.00	25.00	2	50	50	2	50	50
Total				7,350	1,145		7,350	794
Retrospective Conversion								
Total titles	.25		106,991	26,748		80,000	20,000	
Installations (training and supplies)	1,300.00		1	1,300		1	1,300	
Software(1)	6,000.00		1	6,000		1	6,000	
Copy tapes	25.00		6	150		6	150	
Total				34,198	0		27,450	0
Net Combined								
Title input (not required)	-							
Master catalogue titles with								
20 copies, and								
2 cumulations annually			106,991	-	13,524	80,000		10,112
COM fiche readers	200.00	20.00	20	4,000	400	20	4,000	400
Annual titles - added		.24	4,563		1,095	3,101		744
Total titles - retro w/COM	.10		106,991	10,699		80,000	8,000	
Installation (training, supplies)	1,300.00		1	1,300		1	1,300	
Software(1)	6,000.00		1	6,000		1	6,000	
Copy tapes (not required)		-		-				
Total				21,999	15,019		19,300	11,256

Note:

(1) Software to be developed for the communicative terminals for Data Entry to Diskettes will have an estimated total cost of $6,000.

Exhibit II-5 (cont'd.)
Non-Personnel Cost Estimates for a COM Catalog
Cataloging for a COM Vendor

	Kitchigami			Lake Agassiz			Northwest		
	Quantity	Initial	Annual	Quantity	Initial	Annual	Quantity	Initial	Annual
Catalog and File Maintenance									
Title input from tape - Annual	3,514	$ -	246	6,218	$ -	435	1,424	$ -	100
Title input from tape - Initial	50,000	3,500		75,000	5,250		60,000	4,200	
Master catalogue with									
12 copies, 2 cumulations; or	50,000		6,070				60,000		7,284
20 copies, 2 cumulations									
30 copies, 2 cumulations				75,000		9,952			
COM fiche readers	12	2,400	240	30	6,000	600	12	2,400	240
Total		5,900	6,556		11,250	10,987		6,600	7,624
Current Cataloging									
Annual titles	3,514		843	6,218		1,492	1,424		342
Installations (training and supplies)	1	1,300		1	1,300		1	1,300	
Software(1)	1	6,000		1	6,000		1	6,000	
Copy tapes	2	50	50	2	50	50	2	50	50
Total		7,350	893		7,350	1,542		7,350	392
Retrospective Conversion									
Total titles	50,000	12,500		75,000	18,750		60,000	15,000	
Installations (training and supplies)	1	1,300		1	1,300		1	1,300	
Software(1)	1	6,000		1	6,000		1	6,000	
Copy tapes	6	150		6	150		6	150	
Total		19,950	0		26,200	0		22,450	0
Net Combined									
Title input (not required)									
Master catalogue titles with									
12, 20, or 30 copies,									
2 cumulations annually	50,000		6,070	75,000		9,952	60,000		7,284
COM fiche readers	12	2,400	240	30	6,000	600	12	2,400	240
Annual titles - added	3,514		843	6,218		1,492	1,424		342
Total titles - retro w/COM	50,000	5,000		75,000	7,500		60,000	6,000	
Installation (training, supplies)	1	1,300		1	1,300		1	1,300	
Software(1)	1	6,000		1	6,000		1	6,000	
Copy tapes (not required)							-		
Total		14,700	7,153		20,800	12,044		15,700	7,886

Note:

(1) Software to be developed for the Communicative terminals for Data Entry to Diskettes will have an estimated total cost of $6,000.

Exhibit II-5 (cont'd.)
Non-Personnel Cost Estimates for a COM Catalog
Cataloging from a Com Vendor

	Viking			Total - Six Separate Regions			Total - Six Region Cooperative		
	Quantity	Initial	Annual	Quantity	Initial	Annual	Quantity	Initial	Annual
Catalogue and File Maintenance									
Title input from tape - Annual	6,206	$ -	435	25,026	$ -	1,753	12,513	$ -	876
Title input from tape - Initial	75,000	5,250		446,991	31,290		223,496	15,645	
Master catalogue with									
12 copies, 2 cumulations; or	-			110,000		13,354			
20 copies, 2 cumulations; or	75,000		9,480	261,991		33,066	223,496		42,106
30 copies, 2 cumulations				75,000		9,952			
COM fiche readers	20	4,000	400	114	22,800	2,280	114	22,800	2,280
Total		9,250	10,315		54,090	60,404		38,445	45,261
Current Cataloguing									
Annual titles	6,206		1,490	25,026		6,006	12,513		3,003
Installations (training and supplies)	1	1,300		6	7,800		6	7,800	
Software(1)	1	6,000		6	36,000		1	6,000	
Copy tapes	2	50	50	12	300	300	12	300	300
Total		7,350	1,540		44,100	6,306		14,100	3,303
Retrospective Conversion									
Total titles	75,000	18,750		446,991	111,748		223,496	55,874	
Installations (training and supplies)	1	1,300		6	7,800		6	7,800	
Software(1)	1	6,000		1	6,000		1	6,000	
Copy tapes	6	150		36	900		12	300	
Total		26,200	0		126,448	0		69,974	0
Net Combined									
Title input (not required)									
Master catalogue titles with 12 copies, 20 copies, or 30 copies, and 2 cumulations annually	75,000		9,480	446,991		56,372	223,496		42,106
COM fiche readers	20	4,000	400	114	22,800	2,280	114	22,800	2,280
Annual titles - added	6,206		1,490	25,026		6,006	12,513		3,003
Total titles - retro w/COM	75,000	7,500		446,991	44,699		223,496	22,350	
Installation (training, supplies)	1	1,300		6	7,800		6	7,800	
Software(1)	1	6,000		1	6,000		1	6,000	
Copy tapes (not required)	-								
Total		18,800	11,370		81,299	64,658		58,950	47,389

Note:

(1) Software to be developed for the Communicative terminals for Data Entry to Diskettes will have an estimated total cost of $6,000.

OCLC, INC. COSTS

Estimated OCLC, Inc. charges include:

- Terminal purchase and maintenance;
- Phone lines and modems;
- Communications costs;
- First time use charge per title;
- Tape copy charges;
- Installation; and
- Accession lists.

Although the costs of card production might be of value as an interim measure or to support manual locator files, they were not included. See Exhibits II-6, II-7 and II-8 for details of the cost estimates for OCLC services.

Costs were estimated for Current Cataloging and Retrospective Conversion as if each was a separate operation. Net Combined Costs were estimated assuming both activities are performed in one installation.

The Six Region Cooperative cost estimates assume:

- A central processing center is established in one of the regional headquarters for use by all regions;
- All cataloging is done at this processing center;
- The number of terminals, communication costs and other costs are reduced accordingly;
- Costs of materials transportation are not included; and
- A title overlap of 50% among the six regions is assumed and First Time Use (FTU) charges are reduced accordingly.

According to our estimates, use of one processing center for the six regional libraries would reduce non-personal OCLC costs by 30% for initial costs and by 50% for on-going annual costs.

Exhibit II-6
Cataloging from OCLC, Inc.
Estimated Fixed and Variable Non-Personnel Costs(2)

OCLC Charges	Qty.	Initial Unit Cost	Initial Amount	Annual Unit Cost	Annual Amount
Fixed costs per installation:(1)			-0-		-0-
Costs per terminal:					
. Purchase			3,800.00		
. Maintenance					400.00
. Communications					1,600.00
Total per terminal					2,000.00
Costs per phone line:					
. Modem			148.00		360.00
. Telecommunications (see above)			-		-
Total per phone line			148.00		360.00
Costs per title - current:					
. First time use	1			1.36	1.36
. Tape copy	1.3			.013	.0169
. Accession list				.10	.10
Total			-		1.477
Costs per title - restrospective:					
. First time use (non-prime)			-	.05	.05
. Tape copy	1.3			.013	.0169
Total			-		.067
Cost per copy tape			-	25.00	25.00

(1) Minitex provides a standard profile and training at no charge to participating Minnesota libraries.

(2) Based upon a 1980 OCLC, Inc. price list.

Exhibit II-7
Non-Personnel Quantity Estimates
Cataloging from OCLC

	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Six Regions Total	Six Region Cooperative Combined
Current Cataloging								
Annual titles (est.)	4,563	3,101	3,514	6,218	1,424	6,206	25,026	12,514(2)
Titles per hour	12(1)	12	12	12	12	12	12(4)	8(3)
Terminal hours per week	7.6	5.2	5.9	10.4	2.4	10.4	41.9	31.5
No. of terminals	1	1	1	1	1	1	6	1
No. of lines	1	1	1	1	1	1	6	1
No. of copy tapes	4	4	4	4	4	4	24	4
No. of installations	1	1	1	1	1	1	6	1
Restrospective Conversion								
Total titles	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496(2)
Titles per hour (non-prime)	18(1)	18	18	18	18	18	18(4)	12(3)
Terminal hours per week	119	89	56	83	67	83	497	372
No. of terminals	2	2	1	2	1	2	10	6
No. of lines	1	1	1	1	1	1	6	2
No. of copy tapes	12	12	12	12	12	12	72	12
No. of installations	1	1	1	1	1	1	6	1
Net Combined (First Year)								
Titles (first year)	111,554	83,101	53,514	81,218	61,424	81,206	472,017	236,010
Titles per hour (prime time)	12	12	12	12	12	12	12(4)	12
Titles per hour (non-prime)	18	18	18	18	18	18	18(4)	12(3)
Terminal hours per week	126.6	94.2	61.9	93.4	69.4	93.4	538.9	403.5
No. of terminals	2	2	1	2	1	2	10	7
No. of lines	1	1	1	1	1	1	6	3
No. of copy tapes	12	12	12	12	12	12	72	12
No. of installations	1	1	1	1	1	1	6	1

Notes:

(1) Based on the experience of other libraries in comparable circumstances.

(2) Assumed 50% duplication of titles among six regions.

(3) Fewer titles per hour are assumed for the cooperative processing center because duplicate titles among regions must still be searched and noted in the local holdings field.

(4) These productivity rates are averaged, not totalled.

Exhibit II-8
Non-Personnel Costs Estimate
Cataloging from OCLC, Inc.

Cost Element	Unit Cost Initial	Unit Cost Annual	Crow River Qty.	Crow River Initial	Crow River Annual	East Central Qty.	East Central Initial	East Central Annual	Kitchigami Qty.	Kitchigami Initial	Kitchigami Annual	Lake Agassiz Qty.	Lake Agassiz Initial	Lake Agassiz Annual
For Current Cataloging														
Installations	-0-	-0-	1	-	-	1	-	-	1	-	-	1	-	-
Terminals(3)	$ 3,800.00	2,000.00	1	$ 3,800.00	2,000.00	1	$ 3,800.00	2,000.00	1	$ 3,800.00	2,000.00	1	$ 3,800.00	2,000.00
Modems	148.00	360.00	1	148.00	360.00	1	148.00	360.00	1	148.00	360.00	1	148.00	360.00
Titles - current		1.477	4,563	-	6,739.55	3,101	-	4,580.20	3,514	-	5,190.18	6,218	-	9,183.99
Titles - retrospective		.067	-	-	-	-	-	-	-	-	-	-	-	-
Copy tapes		25.00	4	-	100.00	4	-	100.00	4	-	100.00	4	-	100.00
Total				$ 3,948.00	9,199.55(2)		$ 3,948.00	7,040.20(2)		$ 3,948.00	7,650.18(2)		$ 3,948.00	11,643.99(2)
For Retrospective Conversion														
Installations			1	-	-	1	-	-	1	-	-	1	-	-
Terminals(3)	$ 3,800.00	2,000.00	2	$ 7,600.00	4,000.00	2	$ 7,600.00	4,000.00	1	$ 3,800.00	2,000.00	2	$ 7,600.00	4,000.00
Modems	148.00	360.00	1	148.00	360.00	1	148.00	360.00	1	148.00	360.00	1	148.00	360.00
Titles - current		1.477	-	-	-	-	-	-	-	-	-	-	-	-
Titles - retrospective		.067	106,991	-	7,168.40	80,000	-	5,360.00	50,000	-	3,350.00	75,000	-	5,025.00
Copy tapes		25.00	12	-	300.00	12	-	300.00	12	-	300.00	12	-	300.00
Total				$ 7,748.00	11,828.40(1)		$ 7,748.00	10,020.00(1)		$ 3,948.00	6,010.00(1)		$ 7,748.00	9,685.00(1)
Net Combined Cost														
Installations			1	-	-	1	-	-	1	-	-	1	-	-
Terminals(3)	$ 3,800.00	2,000.00	2	$ 7,600.00	4,000.00	2	$ 7,600.00	4,000.00	1	$ 3,800.00	2,000.00	2	$ 7,600.00	4,000.00
Modems	148.00	360.00	1	148.00	360.00	1	148.00	360.00	1	148.00	360.00	1	148.00	360.00
Titles - current		1.477	4,563	-	6,739.55	3,101	-	4,580.20	3,514	-	5,190.18	6,218	-	9,183.99
Titles - retrospective		.067	106,991	-	7,168.40	80,000	-	5,360.00	50,000	-	2,404.00	75,000	-	5,025.00
Copy tapes		25.00	12	-	300.00	12	-	300.00	12	-	300.00	12	-	300.00
Total				$ 7,748.00	18,567.95(1)		$ 7,748.00	14,600.20(1)		$ 3,948.00	10,254.18(1)		$ 7,748.00	18,858.99(1)

Notes:

(1) First year combined cost only.
(2) All subsequent years.
(3) Include annual communications costs per terminal of $1,600.

86

87

Exhibit II-8 (cont'd.)
Non-Personnel Cost Estimates
Cataloging from OCLC, Inc.

Cost Element	Northwest Qty.	Northwest Initial	Northwest Annual	Viking Qty.	Viking Initial	Viking Annual	Total Six Separate Qty.	Total Six Separate Initial	Total Six Separate Annual	Total - Six Region Cooperative Qty.	Total - Six Region Cooperative Initial	Total - Six Region Cooperative Annual
For Current Cataloging												
Installations	1			1			6			1		
Terminals(3)	1	$ 3,800.00	2,000.00	1	$ 3,800.00	2,000.00	6	$ 22,800.00	12,000.00	2	$ 7,600.00	4,000.00
Modems	1	148.00	360.00	1	148.00	360.00	6	888.00	2,160.00	1	148.00	360.00
Titles - current	1,424	-	2,103.25	6,206	-	9,166.26	25,026	-	36,963.43	12,514	-	18,483.00
Titles - retrospective	-	-	-	-	-	-	-	-	-	-	-	-
Copy tapes	4	-	100.00	4	-	100.00	24	-	600.00	4	-	100.00
Total		$ 3,948.00	4,563.25(2)		$ 3,948.00	11,626.26(2)		$ 23,688.00	51,723.43(2)		$ 7,748.00	22,943.48(2)
For Retrospective Conversion												
Installations	1			1			6			1		
Terminals(3)	1	$ 3,800.00	2,000.00	2	$ 7,600.00	4,000.00	9	$ 34,200.00	18,000.00	6	$ 22,800.00	12,000.00
Modems	1	148.00	360.00	1	148.00	360.00	6	888.00	2,160.00	2	444.00	1,080.00
Titles - current	-	-	-	-	-	-	-	-	-	-	-	-
Titles - retrospective	60,000	-	4,020.00	75,000	-	5,025.00	446,991	-	29,948.40	223,496	-	14,974.25
Copy tapes	12	-	300.00	12	-	300.00	72	-	1,800.00	12	-	300.00
Total		$ 3,948.00	6,680.00		$ 7,748.00	9,685.00(1)		$ 35,088.00	51,908.40(1)		$ 23,244.00	28,354.25(1)
Net Combined Cost												
Installations	1			1			6			1		
Terminals(3)	1	$ 3,800.00	2,000.00	2	$ 7,600.00	4,000.00	10	$ 38,000.00	20,000.00	7	$ 26,600.00	14,000.00
Modems	1	148.00	360.00	1	148.00	360.00	6	888.00	2,160.00	2	444.00	1,080.00
Titles - current	1,424	-	2,103.25	6,206	-	9,166.26	25,026	-	36,963.43	12,514	-	18,483.00
Titles - retrospective	60,000	-	4,020.00	75,000	-	5,025.00	446,991	-	29,948.40	223,496	-	14,974.00
Copy tapes	12	-	300.00	12	-	300.00	72	-	1,800.00	12	-	300.00
Total		$ 3,948.00	8,783.25(1)		$ 7,748.00	18,851.26(1)		$ 38,888.00	90,871.83(1)		$ 27,044.00	48,837.00(1)

Notes:

(1) First year combined cost only.
(2) All subsequent years.
(3) Includes annual communications costs per terminal of $1,600.

MINI MARC COSTS

Estimated MINI MARC costs include:

- MINI MARC microcomputer console without printer;
- MARC data base and supplements on diskette;
- Diskette storage;
- Maintenance and installation charges; and
- Copy tapes.

The following costs were not included:

- MINI MARC printer (estimated purchase cost of $7,750), card stock, etc.; and
- RLIN link (estimated at $3,000 + 85 cents per title for connect time and searching.

See Exhibits II-9, II-10 and II-11 for detailed cost estimates.

First Costs were estimated for Current Cataloging and Retrospective Conversion as if each was for a separate installation. Then Net Combined Costs were estimated to recognize the cost savings from using the same console for both activities.

The six region cooperative costs assume:

- one MINI MARC processing center for on-going cataloging and for retrospective conversions established for use by all regions;
- the number of MINI MARC consoles required is reduced accordingly;
- the costs of materials transportation is not included;
- a title overlap of 50% is assumed;

According to our estimates the use of one processing center for the six regional libraries would reduce MINI MARC non-personnel costs by 60% for initial costs and 83% for on-going annual costs, which is primarily due to the reduced number of MINI MARC consoles needed.

Exhibit II-9
Cataloging Using MINI MARC
Quantity Estimates

	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Vikin	Six Regions Total	Six Region Cooperative
Current Cataloging								
Annual titles (est.)	4,563	3,101	3,514	6,218	1,424	6,206	25,026	12,014(3)
Titles per hour(1)	22	22	22	22	22	22	22(5)	14(4)
Terminal hours per week(2)	4.6	3.1	3.5	6.2	1.4	6.2	25.0	18.5
No. of work stations	1	1	1	1	1	1	6	1
No. of data base subscriptions	1	1	1	1	1	1	6	1
No. of copy tapes	2	2	2	2	2	2	12	4
No. of installations	1	1	1	1	1	1	6	1
Restrospective Conversion								
Total titles	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496(3)
Titles per hour(1)	30	30	30	30	30	30	30(5)	20(4)
Terminal hours per week(2)	71.3	53.3	33.3	50	40	50	297.9	213
No. of work stations	1	1	1	1	1	1	6	4
No. of data base subscriptions	1	1	1	1	1	1	6	1
No. of copy tapes	4	4	4	4	4	4	24	12
No. of installations	1	1	1	1	1	1	6	1
Net Combined (First Year)								
Titles - current	4,563	3,101	3,514	6,218	1,424	6,206	25,026	12,014(3)
Titles - retro	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496(3)
Titles per hour - current	22	22	22	22	22	22	22	14(4)
Terminal hours - retro	30	30	30	30	30	30	30	20(4)
Terminal hours/week	75.9	56.4	36.8	56.2	41.4	56.2	322.9	231.5
No. of work stations	1	1	1	1	1	1	6	6
No. of data base subscriptions	1	1	1	1	1	1	6	1
No. of copy tapes	4	4	4	4	4	4	24	12
No. of installations	1	1	1	1	1	1	6	1

Notes:

(1) Based on estimates of other MINI MARC users. See page III-5.
(2) 50 weeks per year.
(3) Adjusted for estimated 50% title overlap among six regions.
(4) Fewer titles per terminal hour are assumed for the cooperative processing center because duplicate titles must still be searched and noted in a local holdings field.
(5) Hourly rates are averaged, not totalled.

Exhibit II-10
Estimated Fixed and Variable
Non-Personnel Costs

Cataloging Using MINI-MARC

Mini-Marc Charges	Qty.	Initial Unit Cost	Initial Amount	Annual Unit Cost	Annual Amount
Costs per installation					
Costs per console:					
. Purchase(1)					
- Console	1	$ 45,000	$ 45,000	$ 5,400	$ 5,400
- Printer	-	7,750	7,750	-	-
- RLIN link	-	3,000	3,000	- (2)	-
. Rental (1 year)					
- Console	1	19,900	19,900	-	-
- Printer	-	2,760	2,760	-	-
- RLIN link	-	3,000	3,000	-	-
Costs per data base:					
. Data base	1	included	-	3,600	3,600
. Miscellaneous equipment	1	included	-	-	-
Costs per title		none		none	
Cost per copy tape	1	25	25	25	25

Notes:

(1) Estimated negotiated cost without MARC data base and cabinets.

(2) RLIN search only service costs not estimated.

Exhibit II-11
Non-Personnel Cost Estimates

Cataloging Using MINI MARC

Cost Element	Unit Cost Initial	Unit Cost Annual	Crow River Qty.	Crow River Initial	Crow River Annual	East Central Qty.	East Central Initial	East Central Annual	Kitchigami Qty.	Kitchigami Initial	Kitchigami Annual	Lake Agassiz Qty.	Lake Agassiz Initial	Lake Agassiz Annual
For Current Cataloging														
Installations	(included)	-	-	$ -	-	-	$ -	-	-	-	-	-	-	-
Consoles (purchase)(1)	45,000.00	5,400.00	1	45,000.00	5,400.00	1	45,000.00	5,400.00	1	45,000.00	5,400.00	1	45,000.00	5,400.00
Data base	(included)	3,600.00	1	-	3,600.00	1	-	3,600.00	1	-	3,600.00	1	-	3,600.00
Copy tapes	25.00	25.00	2	50.00	50.00	2	50.00	50.00	2	50.00	50.00	2	50.00	50.00
Total				45,050.00	9,050.00		45,050.00	9,050.00		45,050.00	9,050.00		45,050.00	9,050.00
For Retrospective Conversion														
Installations	(included)	-	-	-	-	-		-	-	-	-	-		-
Consoles (1 year rental)(1)	19,900.00	-	1	19,900.00	-	1	19,900.00	-	1	19,900.00	-	1	19,900.00	-
Data base	-	-	1	3,600.00	-	1	3,600.00	-	1	3,600.00	-	1	3,600.00	-
Copy tapes	50.00	-	4	200.00	-	4	200.00	-	4	200.00	-	4	200.00	-
Total				23,700.00	-		23,700.00	-		23,700.00	-		23,700.00	-
Net Combined Cost (First Year)														
Installations	(included)	-	-	-	-	-		-	-	-	-	-		-
Consoles(1)	-	-	1	45,000.00	5,400.00	1	45,000.00	5,400.00	1	45,000.00	5,400.00	1	45,000.00	5,400.00
Data base	-	-	1	-	3,600.00	1	-	3,600.00	1	-	3,600.00	1	-	3,600.00
Copy tapes	-	-	4	200.00	50.00	4	200.00	50.00	4	200.00	50.00	4	200.00	50.00
Total				45,200.00	9,050.00		45,200.00	9,050.00		45,200.00	9,050.00		45,200.00	9,050.00

Note:

(1) Does not include printer for cards, pockets and labels.

93

91

Exhibit II-11
(cont'd)
Non-Personnel Cost Estimates

Cataloging Using MINI-MARC

Cost Element	Northwest Qty.	Northwest Initial	Northwest Annual	Viking Qty.	Viking Initial	Viking Annual	Total Six Separate Regions Qty.	Total Six Separate Regions Initial	Total Six Separate Regions Annual	Total - Six Region Cooperative Qty.	Total - Six Region Cooperative Initial	Total - Six Region Cooperative Annual
For Current Cataloging												
Installations	-	$ -	-	-	$ -	-	-	$ -	-	-	$ -	-
Consoles (purchase)(1)	1	45,000.00	5,400.00	1	45,000.00	5,400.00	6	270,000.00	32,400.00	1	45,000.00	5,400.00
Data base	1	-	3,600.00	1	-	3,600.00	6	-	21,600.00	1	-	3,600.00
Copy tapes	2	50.00	50.00	2	50.00	50.00	12	300.00	300.00	4	100.00	100.00
Total		45,050.00	9,050.00		45,050.00	9,050.00		270,300.00	54,300.00		45,100.00	9,100.00
For Retrospective Conversion												
Installations	-	-	-	-		-	-	-	-	-		-
Consoles (1 yr. rental)(1)	1	19,900.00	-	1	19,900.00	-	6	119,400.00	-	4	79,600.00	-
Data base	1	3,600.00	-	1	3,600.00	-	6	21,600.00	-	2	7,200.00	-
Copy tapes	4	200.00	-	4	200.00	-	24	1,200.00	-	12	600.00	-
Total		23,700.00	-		23,700.00	-		142,200.00	-		87,400.00	-
Net Combined Cost (First Year)												
Installations	-	-	-	-		-	-	-	-	-		-
Consoles(1)	1	45,000.00	5,400.00	1	45,000.00	5,400.00	6	270,000.00	32,400.00	4/1(1)	104,700.00	5,400.00
Data base	1	-	3,600.00	1	-	3,600.00	6	-	21,600.00	2/1	3,600.00	3,600.00
Copy tapes	4	200.00	50.00	4	200.00	50.00	24	1,200.00	300.00	12/4	600.00	200.00
Total		45,200.00	9,050.00		45,200.00	9,050.00		271,200.00	54,300.00		108,900.00	9,200.00

Note:

(1) First year/subsequent years.

95

96

ONLINE HEADQUARTERS/COM BRANCHES

Non-personnel costs include costs for a smaller minicomputer with a maximum of four to six terminals located in the regional headquarters used as an online catalog and locator file, plus the costs for COM catalog and readers. In the Viking Library system, costs include terminals at the three largest member libraries, Morris, Fergus Falls and Alexandria. Cost items include:

- Computer equipment;
- Terminals;
- Software;
- Supplies;
- Maintenance;
- Installation charges and expenses;
- COM Fiche readers;
- Per title charges;
- Copy tape charges;
- Charges for the COM master;
- Charges for copies as required by each Regional Library; and
- Software for the communications terminals.

See Exhibits II-12 and II-13 for quantities and costs associated with this option.

For COM catalogs, we have used Brodart price lists as an example of current prices. For the Headquarters Online Catalog we used price quotations for a new mini-circulation/online catalog system from Dataphase as an example of current prices. Other vendors have competing product offerings.

First, costs were estimated for each activity (Catalog and File Maintenance, Current Cataloging, Retrospective Conversion) as if each were performed as a separate operation. Then, Net Combined Costs were assuming that cataloging, retrospective conversion, and COM catalog production are performed by the same estimated vendor. Costs of the Headquarters Online catalog are included in Catalog and File Maintenance costs.

Cost of a Six Region Cooperative effort assumes:

- A six region union COM catalog is produced with 120 copies;
- Each region continues to carry out its own cataloging using the communications terminals to enter data on diskettes;
- The cost of software is shared by the regions;
- A title overlap of 50% is assumed and costs are reduced accordingly;
- Holding symbols for each of the six regions would be included;
- All regions receive copies of the union catalog and do not have individual COM catalogs; and
- One computer with an online catalog and locator system is installed and used by all regions from the Headquarter Libraries only, except for Viking, where the three major public libraries would also have terminals.

Exhibit II-12
Headquarters Online - Branch [illegible]talog
Estimated Quantities

Headquarters Online	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Six Region Total	Six Region Cooperative System
Catalog and File Maintenance								
Installations	1	1	1	1	1	1	6	1
Computer equipment(3)	1	1	1	1	1	1	6	1
Catalog terminals(2)	4	3	2	3	2	4	18	18
Circulation/locator terminals	2	2	2	3	2	4	15	15
Connections:								
- Leased lines	-	-	-	-	-	-	-	16
- Dial in lines	-	-	-	-	-	3	3	0
- Direct/local lines	6	5	4	6	4	2	27	6
Copy tapes(1)	2	2	2	2	2	2	12	2
Titles in data base	106,991	80,000	50,000	75,000	60,000	75,000	446,991	223,496
Annual titles	4,563	3,101	3,514	6,218	1,424	6,206	25,026	12,513

Note:

(1) With full catalog records from the COM vendor.

(2) The online catalog is primarily for staff use; additional public access points are through COM catalogs. With additional funds, more public access catalog terminals can be added.

(3) A small system supporting 4 to 8 terminals and 60 to 140 megabytes of storage is needed for online catalogs used only at headquarters and large member libraries.

Exhibit II-13
Headquarters Online - Branch COM Catalog

Estimated Non-Personnel Costs

	Unit Cost		Crow River			East Central			Kitchigami			Lake Agassiz		
	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual
Headquarters Online[2] Catalog and File Maintenance														
Computer equipment	Depends upon region		1	$ 90,000.00	9,000.00	1	85,000.00	8,500.00	1	80,000.00	8,000.00	1	90,000.00	9,000.00
Services/software			-	-	-	-	-	-	-	-	-	-	-	-
Supplies	Depends upon region			4,000.00	200.00	-	4,000.00	200.00	-	4,000.00	200.00	-	4,000.00	200.00
Catalog terminals	$ 2,500.00	400.00	4	10,000.00	1,600.00	3	7,500.00	1,200.00	2	5,000.00	800.00	3	7,500.00	1,200.00
Circulation/Locator terminals	3,500.00	450.00	2	7,000.00	900.00	2	7,000.00	900.00	2	7,000.00	900.00	3	10,500.00	1,350.00
Leased telephone lines	400.00	1,230.00	-	-	-	-	-	-	-	-	-	-	-	-
Dial-in telephone lines	325.00	630.00	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	10,000.00	-	-	10,000.00	-	-	10,000.00	-	-	10,000.00	-	-	10,000.00	-
Copy tapes	25.00	25.00	2	50.00	50.00	2	50.00	50.00	2	50.00	50.00	2	50.00	50.00
Total				121,050.00	11,750.00		113,550.00	10,850.00		106,050.00	9,950.00		122,050.00	11,800.00
COM Catalog														
Total[1]			20	11,490.00	14,244.00	20	9,600.00	10,729.00	12	5,900.00	6,556.00	30	11,250.00	10,987.00
Current Cataloging - COM Vendor														
Total[1]				7,350.00	1,145.00		7,350.00	794.00		7,350.00	893.00		7,350.00	1,542.00
Retrospective Conversion - COM Vendor														
Total[1]				34,198.00	-		27,450.00	-	1	19,950.00	-	-	26,200.00	-
Net COM Fixed Cost - Online & COM														
Headquarters Online Total				121,050.00	11,750.00		113,530.00	10,850.00		106,050.00	9,950.00		122,050.00	11,800.00
Net Combined COM Cost[1]				21,999.00	15,019.00		19,300.00	11,256.00		14,700.00	7,153.00		20,800.00	12,044.00
Total				143,049.00	26,769.00		132,850.00	22,106.00		120,750.00	17,103.00		142,850.00	23,844.00

Notes:

(1) COM costs estimates taken from Exhibit II-5, Cost Estimates for a COM Catalog.
(2) For the Viking Region: Headquarters, Morris, Alexandria and Fergus Falls.

Exhibit II-13
(cont'd)
Headquarters Online - Branch COM Catalog

Estimated Non-Personnel Costs

	Northwest			Viking			Total - Six Separate Regions			Total - Six Region Cooperative		
	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual	Qty.	Initial	Annual
Headquarters Online Catalog and File Maintenance												
Computer equipment	1	$ 90,000.00	8,000.00	1	90,000.00	9,000.00	6	425,000.00	42,500.00	1	230,000.00	16,000.00
Services/software	-	-	-	-	-	-	-	-	-	-	45,000.00	10,800.00
Supplies		4,000.00	200.00	-	4,000.00	200.00	-	24,000.00	1,200.00	-	10,000.00	500.00
Catalog terminals	2	5,000.00	800.00	4	10,000.00	1,600.00	18	45,000.00	7,200.00	18	45,000.00	7,200.00
Circulation/Locator terminals	2	7,000.00	900.00	4	14,000.00	1,800.00	15	52,500.00	6,750.00	15	52,500.00	6,750.00
Leased telephone lines	-	-	-	-	-	-	0	-	-	16	6,400.00	19,680.00
Dial-in telephone lines	-	-	-	3	-	-	3	975.00	1,890.00	-	-	-
Miscellaneous	-	10,000.00	-	-	10,000.00	1,890.00	-	60,000.00	-	-	25,000.00	-
Copy tapes	2	50.00	50.00	2	50.00	50.00	12	300.00	300.00	2	50.00	50.00
Total		106,050.00	9,950.00		129,025.00	14,540.00		607,775.00	59,840.00		413,900.00	60,980.00
COM Catalog												
Total(1)	12	6,600.00	7,624.00	20	9,250.00	10,315.00		54,090.00	61,186.00	120	38,445.00	45,261.00
Current Cataloging - COM Vendor												
Total(1)		7,350.00	392.00		7,350.00	1,540.00		44,100.00	6,306.00	-	14,100.00	3,303.00
Retrospective Conversion - COM Vendor												
Total(1)		22,450.00	-		26,200.00	-		126,448.00	-	-	69,974.00	-
Net COM Fixed Cost - Online & COM												
Headquarters Online Total		106,050.00	9,950.00		129,025.00	14,540.00		607,775.00	59,840.00		413,900.00	50,980.00
Net Combined COM Cost(1)		15,700.00	7,886.00		18,800.00	11,370.00		81,299.00	64,236.00		58,950.00	51,263.00
Total		121,750.00	17,836.00		147,825.00	25,910.00		689,074.00	124,076.00		472,850.00	112,243.00

Note:

(1) COM costs estimates taken from Exhibit II-5, Cost Estimates for a COM Catalog.
(2) For the Viking Region: Headquarters, Morris, Alexandria, Fergus Falls.

III PERSONNEL COSTS

Personnel costs are an important factor in selecting among these alternatives. The cost estimates and savings in this report represent the value assigned to staff time based on their average salary and benefits per hour. The cost estimates are not intended to represent changes in total staffing levels.

Cost estimates are based on data gathered in the six regional libraries and allocations of labor effort made in cooperation with their staffs. Cost estimates are included in the later sections for each regional library.

PRESENT METHODS

Present methods maintain card catalogs, shelf lists and locator files through use of cards from book jobbers and manually prepared catalog cards.

Personnel costs in the six regions show substantial differences in labor costs per title for cataloging and file maintenance activities. These are due to a combination of variances in current procedures, standards, salaries, staffing and estimated allocations of time to various activities.

See Exhibit III-1 for an analysis of current personnel costs.

Exhibit III-1
Analysis of Cataloging Personnel Costs
by Regional Library

	Librarians		Technical			
	MLS	BA/BS	Assistants	Clerical	Other	Totals
Crow River						
Rate per FTE[1]	$ 7.64[2]	6.00	5.02	3.75	3.35	N/A
Cataloging	$ 3,178	2,496	2,088	1,560	-	9,322
Catalog Maintenance	-	3,120	3,655	3,900	-	10,675
Locator File Maintenance	1,589	-	-	3,120	-	4,709
Shelf List Maintenance	-	-	1,044	11,700	-	12,744
On-Order File Maintenance	795	624	1,566	-	-	2,985
Total						$ 40,435
East Central						
Rate per FTE	$ 7.62[2]	5.54	-	4.26	4.92	N/A
Cataloging	$ -	2,936	-	3,365	-	6,301
Catalog Maintenance	-	2,709	-	886	-	3,595
Locator File Maintenance	-	-	-	3,987	-	3,987
Shelf List Maintenance	-	920	-	-	-	920
On-Order File Maintenance	-	-	-	3,544	-	3,544
Total						$ 18,347
Kitchigami						
Rate per FTE	$ 7.59[2]	-	-	3.55	4.80	N/A
Cataloging	$ -	-	-	12,155	-	12,155
Catalog Maintenance	-	-	-	738	-	738
Locator File Maintenance	-	-	-	589	-	589
Shelf List Maintenance	-	-	-	185	-	185
On-Order File Maintenance	-	-	-	-	-	-
Total						$ 13,667

Notes:
(1) All rates per FTE include salary and benefits.
(2) Excluding directors.

Exhibit III-1 (Continued)
Analysis of Cataloging Personnel Costs
by Regional Library

	Librarians		Technical			
	MLS	BA/BS	Assistants	Clerical	Other	Totals
Lake Agassiz						
Rate per FTE	$ 7.58(2)	$ 5.87	$ 4.26	$ 4.20	$ 6.02	N/A
Cataloging	$1,577	-0-	-0-	-0-	-0-	$ 1,577
Catalog Maintenance	-0-	$ 607	$ 886	$ 874	$5,009	7,376
Locator File Maintenance	-0-	-0-	-0-	-0-	7,513	7,513
Shelf List Maintenance	-0-	610	-0-	437	-0-	1,047
On-Order File Maintenance	-0-	610	-0-	437	-0-	1,047
Total						$18,560
Northwest						
Rate per FTE	$ 5.34(2)	$ 5.69	-0-	$ 4.28	$ 5.20	N/A
Cataloging	$1,880	-0-	-0-	$3,206	$ 218	$5,304
Catalog Maintenance	-0-	-0-	-0-	445	432	877
Locator File Maintenance	-0-	-0-	-0-	-0-	-0-	-0-
Shelf List Maintenance	-0-	-0-	-0-	-0-	109	109
On-Order File Maintenance	-0-	-0-	-0-	-0-	322	322
Total						$6,612
Viking - Headquarters						
Rate per FTE	$ 8.02(2)	$ 4.60	$ 5.26	$ 5.61	$ 3.86	N/A
Cataloging	$ 337	-0-		-0-	-0-	$ 337
Catalog Maintenance	333	-0-	$ 547	-0-	-0-	880
Locator File Maintenance	333	-0-	547	-0-	-0-	880
Shelf List Maintenance	333	-0-	547	-0-	-0-	880
On-Order File Maintenance	333	-0-	547	-0-	-0-	880
Total						$3,857

PRODUCTIVITY OF ALTERNATIVES

Productivity is a sensitive topic in evaluating alternatives. However, we believe that it is essential to address the issue directly. Productivity depends upon a variety of factors, many of which are under the control of library administration. These include:

- Standards for quality of catalog records;
- Desired level of control and precision over records and materials;
- Choice of material classifications to be cataloged;
- Organization, physical environment and motivation;
- Procedures; and
- Choice of tools and supporting services.

We are focusing on the differences resulting from the last two items. We have assumed that every alternative must meet the same standards for quality and control.

We considered for current and retrospective cataloging:

- Hit rates;
- Titles per terminal-hour; and
- Titles per person-hour.

Exhibit III-2 provides our estimates of productivity for each alternative.

Exhibit III-2
Cataloging Productivity
Estimates[1]

	Current			Retrospective		
	Hit Rate	Titles per Terminal Hour[2]	Titles per Person Hour	Hit Rate	Titles per Terminal Hour[2]	Titles Per Person Hour
COM Vendor-Diskette Input	90%			90%		
Copy Records		45	45		60	60
Original Records		12	12		12	12
Editing[3]			20			25
Average		42	13		55	17
OCLC, Inc.	95%[4]			98%		
Copy Records		13	13		18	18
Original Records		6	6		8	8
Average		12	12		18	18
MINI MARC	80%			90%		
Copy Records		25	22		32	26
Original Records		12	20		12	10
Average		22	20		30	25

Notes

(1) Estimates of productivity are based on a balanced consideration of vendor claims and actual experience in other libraries. They are intended to be conservative.

(2) Response times are an important factor in determining productivity per terminal hour.

(3) Commercial COM vendor is essentially a batch process; diskettes are keyed at the library with search agruments and record modifications, and edit lists are returned within two weeks for review.

(4) Battelle's recent study on the utilities noted a 95% hit rate for public libraries within four weeks of receiving materials for OCLC users.

STAFFING REQUIREMENTS AND COSTS

Based on the estimated productivities, time spent on current activities and the volume of activity, we estimated staffing requirements:

- in each regional library; and
- for a six region cooperative.

These represent estimated total staff requirements to perform the activites under study:

- Catalog and File Maintenance
- Current Cataloging
- Retrospective Conversion

Data in Exhibit III-3 indicates that there would be significant savings in staff time for Current Cataloging and Catalog and File Maintenance resulting from automation, comparing present methods to COM, OCLC or MINI MARC. Savings vary depending on the alternative. In most instances, the savings are fragmented and cannot be translated into overall staff reductions but can result in redeployment of staff effort to improve services.

Exhibit III-4 summarizes the estimated personnel costs for each regional library which were calculated using the reported salaries in the respective regional libraries.

Exhibit III-3
Estimated Staffing Requirements for Catalog and File Maintenance, Current Cataloging and Retrospective Conversion

	Titles per Person Hour	Estimated Full Time Equivalent (FTE[1]) Staff							
		Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Total Six Separate Regions	Total Six Region Cooperative[6]
Catalog and File Maintenance									
Present Method[5]		3.45	1.24	.45	1.45	.13	1.33	8.05	N/A[2]
Online Catalog[3]		.25	.40	.25	.10	.03	.17	1.20	1.20
COM Catalog[4]		.75	.85	.33	.70	.03	.24	2.90	2.90
OCLC, Inc.		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MINI-MARC		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current Cataloging									
Present Method									
- Titles Per Person Hour		3.4	6.3	1.3	37.0	1.8	2.60		
- FTE (annual)		.80	.635	1.646	0.10	.48	1.42	5.1	N/A
Online Catalog	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COM Catalog	13	.21	.15	.16	.28	.07	.29	1.16	1.16
OCLC, Inc.	12	.22	.16	.17	.30	.08	.31	1.24	.93
MINI-MARC	20	.14	.09	.10	.18	.05	.19	0.75	.56
Retrospective Conversion									
Present Method	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Online Catalog	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COM Catalog	17	3.8	2.8	1.8	2.6	2.1	2.6	15.7	15.7
OCLC, Inc.	18	3.6	2.7	1.7	2.5	2.0	2.5	15.0	11.3
MINI-MARC	25	2.5	1.9	1.2	1.8	1.4	1.8	10.6	8.0

Notes

(1) 35 hours per week times 46 weeks per year equals one Full Time Equivalent (FTE) for planning purposes because we assume that people do not work 40 hours per week without interruption.

(2) N/A means Not Applicable.

(3) Online eliminates most locator, shelf list and catalog maintenance (filing) labor.

(4) COM catalogs eliminates most shelf list and catalog maintenance (filing) labor.

(5) As reported by the Regional Libraries.

(6) With a 50% title overlap labor requirements are reduced by an estimated 25% in a cooperative processing center versus individual activity for OCLC and MINI-MARC options, while labor for cataloging through a COM vendor remains unchanged.

Exhibit III-4
Estimated Staffing Costs[1] for
Catalog and File Maintenance, Current
Cataloging and Retrospective Conversion

	Crow River	East Central	Kitchigami	Lake Agassiz	Northwest	Viking	Total Six Separate Regions	Total Six Region Cooperative[3]
Catalog and File Maintenance								
Present Method	$ 31,113	12,048	4,010	16,986	1,310	14,466	79,933	N/A
On-line Catalog	2,985	3,544	2,496	1,047	324	2,028	12,424	11,944
COM Catalog	7,694	7,532	3,087	8,560	324	2,892	30,089	27,975
OCLC, Inc.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MINI-MARC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Online Hdqtrs/COM Branches	2,985	3,544	2,496	1,047	324	2,028	12,424	11,944
Current Cataloging								
Present Method	11,365	6,301	12,155	1577	5,304	17,275	53,977	N/A
On-line Catalog	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COM Catalog	2,465	1,325	1,434	2,689	722	3,096	11,731	10,816
OCLC, Inc.	2,515	1,382	1,508	2,794	811	3,255	12,265	8,486
MINI-MARC	1,680	810	907	1,746	544	2,082	7,819	5,407
Online Hdqtrs/COM Branches	2,465	1,325	1,434	2,689	722	3,096	11,731	10,816
Retrospective Conversion								
Present Method	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
On-line Catalog	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COM Catalog	41,396	28,339	19,622	24,638	22,356	27,290	233,376	156,884
OCLC, Inc.	38,730	27,992	17,675	23,442	21,364	25,938	155,141	112,840
MINI-MARC	28,829	20,271	13,722	17,288	15,449	19,094	114,653	95,940
Online Hdqtrs/COM Branches	41,396	28,339	19,622	24,638	22,356	27,290	163,641	156,884

Notes

(1) Based on average salaries reported by each required library; detail computations are included in subsequent sections of this report

(2) N/A means Not Applicable

(3) Based on salaries averaged overall Regions

IV. EVALUATION AND CONCLUSIONS

This section presents our evaluation and a summary of conclusions for the Six Regional Libraries. We developed conclusions based upon our understanding of the needs, priorities, financial position and environment in Minnesota as well as our analysis of the current and expected costs.

COMPARISON OF TOTAL COSTS

Exhibits IV-1a, b and c present the average annual costs (including tangible benefits) over five years for six combined alternatives, including:

1. Present methods.
2. Online catalog/locator system supporting all branches.
3. COM vendor for all activities.
4. OCLC for cataloging and retrospective conversion, with a COM catalog.
5. MINI MARC for cataloging and retrospective conversion with a COM catalog.
6. Online catalog/locator system supporting headquarters and agency libraries only, with COM catalogs placed at the branches.

Costs are given for individual regions and for six regional cooperative efforts.

The costs and tangible benefits of the alternatives are compared on the basis of initial costs and average annual cost over five years. This cost reflects the following methodology:

- Initial and ongoing costs are included.
- Personnel costs based on wage rates supplied by each region are included. They reflect the allocation of time to the activities studied and do not necessarily reflect changes in staff size.
- Costs of equipment, supplies, services and other expenses are included.
- Space, utilities and overhead costs are not included.
- We did not consider:
  - inflation in salaries, services and supplies costs;
  - change in costs of computer equipment; and
  - interest rates, present value or opportunity costs of funds used.

Changes in these factors could result in significant variation of costs within 10% to 15% of our estimates.

Exhibit IV-1a, Summary of Annual Costs, presents the total ongoing costs for each alternative and region. The average cost per region is compared with costs estimated for six-region cooperative actions. Annual costs range from $10,000 to $40,000 for automated alternatives versus $8,000 to $50,000 for present methods.

Exhibit IV-1b, Summary of Initial Costs, presents the total initial costs of equipment and retrospective conversion for each alternative and region. The average initial cost per region is compared with costs estimated for six-region cooperative actions. Initial costs range from $40,000 to $200,000.

Exhibit IV-1c, Summary of Total Costs, presents the total of initial and ongoing costs, averaged over five years for each region. Costs are compared with those estimated for six-region cooperative action.

Exhibit IV-1a
Summary of Annual Costs(3)

	Annual Costs								
	Present Method	Online Catalog(1)	COM Vendor	OCLC and COM	MINI MARC and COM	MINI MARC (Retro only) and COM	Online Hdqtr COM Branches	Online Hdqtrs COM Branches and OCLC	Online Hdqtrs COM Branches MINI MARC
1. Crow River	$ 46,760	47,135(1)	25,178	33,043	33,068	25,178	32,219	40,694	32,219
2. East Central	20,367	42,664(1)	20,113	26,683	28,121	20,113	31,390	37,960	31,390
3. Kitchigami	14,191	34,326(1)	11,674	18,801	19,600	11,674	21,024	28,151	21,024
4. Lake Agassiz	28,407	39,297(1)	23,293	33,985	30,343	23,293	27,580	38,272	27,580
5. Northwest	7,457	30,454(1)	8,932	13,340	17,572	8,932	18,882	23,272	18,882
6. Viking(2)	35,631	39,498(1)	17,371	28,088	24,339	17,371	31,034	41,764	31,034
Six Region Average	25,808	38,896(1)	17,760	25,657	25,507	17,760	27,021	35,063	27,021
Six Region Cooperative Per Region	25,808	27,605(1)	15,009	17,444	14,624	15,009	22,132	24,508	22,132

Notes

(1) Online catalog costs exclude cost of current cataloging and acquiring machine-readable records, estimated to be $3,000 to $10,000 per year per region.
(2) Estimates are based on average wages of member libraries

(3) Detailed costs are presented on the following pages:
VI-14 - Crow River
VII-14 - East Central
VIII-14 - Kitchigami
IX-14 - Northwest
X-14 - Lake Agassiz
XI-34 - Viking
XII-2 - Six Region Cooperative

Exhibit IV-1b
Summary of Initial Costs

	Initial Costs								
	Present Method	Online Catalog(1)	COM Vendor	OCLC and COM	MINI MARC and COM	MINI MARC (Retro only) and CUM	Online Hdqtr COM Branches	Online Hdqtrs COM Branches and OCLC	Online Hdqtrs. COM Branches MINI MARC
1. Crow River	$ -	305,625(1)	63,395	67,366	85,519	71,369	184,445	188,386	192,540
2. East Central	-	291,900(1)	47,637	52,900	75,071	60,921	161,187	166,450	174,471
3. Kitchigami	-	270,725(1)	41,672	30,127	64,722	50,762	140,372	128,827	156,722
4. Lake Agassiz	-	294,775(1)	45,538	49,685	73,768	59,618	167,588	171,735	181,668
5. Northwest	-	255,900(1)	38,236	36,132	67,149	53,099	144,286	142,182	159,149
6. Viking	-	288,600(1)	46,090	50,161	73,444	59,394	167,135	171,200	180,439
Six Region Average	-	284,588(1)	47,095	47,729	72,446	59,194	160,836	161,463	174,165
Six Region Cooperative Per Region	-	124,666(1)	43,167	33,987	40,547	38,256	104,955	123,565	108,298

Notes

(1) Online catalog costs exclude initial costs of retrospective conversion, estimated to be $35,000-75,000 per region.

Exhibit IV-1c
Summary of Total Costs

	Average Total Cost Over Five Years								
	Present Method	Online Catalog(1)	COM Vendor	OCLC and COM	MINI MARC and COM	MINI MARC (Retro only) and COM	Online Hdqtr COM Branches	Online Hdqtrs COM Branches and OCLC	Online Hdqtrs COM Branches; MINI MARC
1. Crow River	$ 46,760	108,000	37,857	46,510	50,171	39,452	69,108	78,371	70,727
2. East Central	20,367	102,900	29,640	37,263	43,135	32,297	63,627	71,250	66,284
3. Kitchigami	14,191(2)	88,470	20,008	24,826	32,544	21,808	49,098	53,916	32,368
4. Lake Agassiz	28,397	98,250	32,400	43,922	45,097	35,217	61,090	72,619	63,914
5. Northwest	7,457	81,635	16,579	20,566	30,972	19,552	47,739	51,708	50,712
6. Viking(3)	35,534	97,218	26,561	38,120	38,028	29,222	66,057	76,005	67,122
Six Region Average	25,791	96,079(1)	27,174	35,201	39,991	29,591	59,454	67,312	61,854
Six Region Cooperative Per Region		52,538(1)	22,203	24,141	22,733	22,660	43,124	45,102	43,792

(1) Does not include costs of retrospective conversion and cataloging.

(2) Assuming that volunteer labor valued at $2,496 per year continues.

(3) Estimates are based on average wages of member libraries.

COOPERATIVE VS. INDIVIDUAL ACTION

Our cost analysis indicates that there would be significant cost savings from cooperative actions. However, there are trade-offs and complications that mitigate the benefits, depending on the activity in question. The benefits of cooperative actions in terms of the priorities stated by the regions are summarized in Exhibit IV-2a.

- Collective Purchasing and Evaluation

  If the regions can benefit by using the same vendor, this may be worth the attendant complications and delays. Using the same vendor for retrospective conversion and current cataloging allows sharing machine readable records. Accordingly, if several regions do solicit bids from COM vendors at approximately the same time, they should work together.

- Processing Center

  A processing center can reduce the cost and improve the quality of ongoing cataloging by allowing several libraries to share cataloging equipment, services and skilled staff. If the regions were using OCLC or MINI MARC for current cataloging, centralizing the operation in a processing center would save $8,000 to $10,000 per region per year in cataloging costs and $15,000 to $25,000 per region in initial costs for equipment and retrospective conversion. However, there are substantial additional costs of transportation required to support a processing center. Delays in processing and administrative requirements also are trade-offs to be considered.

- Joint Computer Center

  A joint computer center would allow the regions to share the cost and necessary technical support. Our estimates show a potential savings of $35,000 per region in initial costs and $5,000 per region per year in operating costs for an on-line catalog/locator system supporting each regional headquarters and principle members. The most important trade-offs are administrative complications, cost recovery and vulnerability to telephone line problems over longer distances. We note that the State University System is successfully using a central computer for its on-line catalog.

- Multi-Region Union Catalog

  A multi-region union catalog, if produced alone, would cost less than individual regional catalogs, giving savings of about $2,000 per year per region. Separate regional COM catalogs would be much more convenient to use and worth the additional expense. A multi-region union catalog is therefore seen only as a supplement to individual COM catalogs.

- Minnesota Multi-County Multi-Type Regions

  Minnesota Multi-County Multi-Type Regions were formed to facilitate cooperative efforts and services among types of libraries in Minnesota. The first year funding of $25,000 to $40,000 per Multi-County Multi-Type Region is modest relative to the costs of catalog conversion. They provide some administrative structure that could aid the conversion projects and attract funds. Some Multi-County Multi-Type Regions are planning to support cataloging and computer-related services.

Each region is facing a different set of circumstances and local needs that affect the choice and timing of a catalog conversion alternative. Furthermore, a majority of the funding is expected to be from local sources. Accordingly, we recommend that the regions focus on individual actions using the alternative and schedule that is best suited to them.

Exhibit IV-2a
Comparison of Priorities of the Catalog
with Benefits of Cooperative Efforts

PRIORITIES OF THE CATALOG	1. Multiple Access Points to individual regional union catalogs with location records in entries	2. Catalogs immediately updated including items on order	3. Catalogs Compatible and linkable with catalogs in other libraries including other types of libraries
COOPERATIVE ACTIONS			
• Collective Purchasing and Evaluations	No effect	No effect	Promotes compatibility
• A Processing Center	No effect	Can affect timing either favorably or adversely	No effect
• A Joint Computer Center	Makes online locator system more affordable	Makes this more affordable	Catalog is compatible and linked with other users
• A Multi-Type Region Union Catalog	Not an individual regional catalog but regional symbols can be noted	No effect	Catalog is compatible and linked with the other regional libraries

COMPARISON OF THE ALTERNATIVES

This subsection gives a general comparison and conclusions regarding the alternatives. The specific conclusions for each region are given in their respective sections of this report.

Catalog Form -

We found that combining an online catalog/locator system serving headquarters and large members with COM catalogs in the other agencies (or branches) is, in our opinion, the best alternative form for East Central, Lake Agassiz and Viking.

The online catalog systems would be used by reference and circulation desk staff and, optionally, by patrons. The ability to maintain location information dynamically is especially important where part of the collection is rotated, as in East Central, Lake Agassiz and Viking.

COM catalogs do not have this capability. Accordingly, locator files with cards maintained manually will still be needed in addition to the COM catalog. Also, there would be a one to five month delay before new titles are added to branch catalogs with COM.

The advantage of COM is the relatively low cost of developing a union catalog for each region and providing copies of the Regional Union Catalog for public access to all agencies in the region. We recommend COM catalogs to Northwest, Kitchigami and Crow River.

Current Cataloging -

The stated priorities of the catalog are best satisfied by current cataloging through OCLC, Inc. (see Exhibit IV-6). It provides the desired features of linking and compatibility with other libraries and other types of libraries in Minnesota. It also provides a very large catalog data base and is a well regarded tool for cataloging, pre-acquisition checking and pre-interlibrary loan checking.

We rate MINI MARC next in terms of benefits for those regions. MINI MARC's high fixed cost for equipment makes it too expensive for the smaller regions. It is more economical for a larger region, such as Viking or Lake Agassiz, or a multi-region processing center. MINI MARC will produce cards for locator files and shelf lists as well as machine-readable records for COM or online catalogs.

Cataloging through a COM vendor using diskette input is rated third. There are significant delays and cumbersome steps in the batch processing cycle for retrieval and editing of catalog records. However, this method is much less expensive for current cataloging than MINI MARC and OCLC for these regions.

Retrospective Conversion -

The method of retrospective conversion chosen does not affect the stated priorities of the catalog. The main considerations, therefore, are cost, convenience and compatibility. OCLC, Inc. has provided the best service for retrospective conversion. However, recent changes in prices and features have made OCLC and MINI MARC comparable as conversion tools for the regional libraries. Use of diskette input to a COM vendor is less convenient and involves more paperwork and editing. Use of a "borrowed" data base on an online catalog is only a partial solution and must be supplemented by one of the other options.

For regions choosing OCLC for current cataloging, we recommended OCLC for retrospective conversion.

For regions choosing a COM vendor for current cataloging, we recommended either the COM vendor or MINI MARC for retrospective conversion. In this case, the MINI MARC would be rented, not purchased, and used in an overtime or two shift conversion operation. MINI MARC may cost somewhat more, but it would reduce paperwork and multiple reviews of each record, which would make the conversion process more manageable. During the retrospective conversion process, MINI MARC would also be used for current cataloging until the first COM catalog is produced.

Exhibit IV-2b
Comparison of Priorities of the Catalog
with Benefits of Alternatives

PRIORITIES OF THE CATALOG	1. Multiple Access Points to individual regional union catalogs with location records in entries	2. Catalogs immediately updated including items on order	3. Catalogs Compatible and linkable with catalogs in other libraries including other types of libraries
ALTERNATIVES			
• Present Methods	Location of rotating collections not noted in union card catalogs, branches do not have access to a union catalog	Done in card files	Not linkable or compatible
• Online Catalog/Locator	Yes	Can be done	Does not guarantee compatibility
• COM Vendor	No location indicators for rotating collections; card locator files needed	Delay of 1 to 3 months; separate shelf list and on order files needed	Does not guarantee compatibility
• OCLC with COM	No location indicators for rotating collections; card locator files needed	Holding is immediately noted in the OCLC union catalog for staff; delay of 1 to 3 months for COM catalog; separate shelf list needed	Linked via OCLC network and union catalog; compatible with Minnesota State Universities; valuable for pre-ILL and pre-acquisition checking
• MINI MARC with COM	No location indicators for rotating collections; card locator files needed	Holding can be immediately added to a local catalog on floppy diskettes for staff access; delay of 1 to 3 months for COM catalog	Does not guarantee compatibility
• Online Headquarters/ COM Branches	Yes, locator update must be centrally controlled	Yes, can be done; only accessible centrally at headquarters and agency libraries	Does not guarantee compatibility
• Online Headquarters/ COM Branches/OCLC	Yes, locator update must be centrally controlled	Holding is immediately noted in the OCLC union catalog; can be added immediately to the online catalog; delay of 1 to 3 months for COM catalog in branches	Linked via OCLC network and union catalog, compatible with Minnesota State Universities; valuable for pre-ILL checking

SUMMARY OF RECOMMENDATIONS

Exhibit IV-3 presents a summary of our recommendations to the Six Regional Libraries. Regional requirements, cost estimates, objectives and local situations were considered in developing the recommendations which vary from region to region.

Sections VI through XI present recommendations and supporting data for each region.

Exhibit IV-3
Recommendations Summary

	Catalog Form				Current Cataloging	Retrospective Conversion
	Catalog	Shelf List	Locator	On-Order		
Crow River	COM	Cards	Cards	Cards	OCLC	OCLC
East Central	Online/COM	Cards	Online	Online	COM Vendor	MINI MARC
Kitchigami	COM	Cards	Cards	Cards	OCLC	OCLC
Lake Agassiz	Online/COM	Cards	Online	Online	COM Vendor	MINI MARC
Northwest	COM	Cards	N/A	Cards	OCLC	OCLC
Viking	Online/COM	Cards	Online	Online	COM Vendor	MINI MARC

V. CONVERSION PLANNING

PRELIMINARY TASKS

Before beginning the retrospective conversion of your catalogs, the regional libraries should work on the following tasks:

Task 1 - Fund Raising

Each regional library will have to seek funds to support the conversion project and any additions to budget needed to accommodate ongoing expenses. A number of potential funding sources should be included in your solicitation efforts by the regional library systems.

At the National Level

- These foundations have supported library automation projects at major institutions and networks that would probably not be receptive to your grant proposals:
  - Council on Library Resources, Washington, D.C.
  - Rockefeller Foundation, New York, New York
  - Mellon Foundation, New York, New York
  - Hewlett Foundation, San Francisco, California
- These foundations have supported library automation efforts and catalog conversions in the Midwest and may be receptive to your proposals:
  - Kellog Foundation, Michigan
  - Kresge Foundation, Michigan
  - Sloan Foundation, New York, New York

At the State Level

- Two foundations based in Minnesota have supported library automation projects in the past:
  - Bush Foundation, Saint Paul, Minnesota
  - Northwest Area Foundation, Saint Paul, Minnesota
- We also recommend applying for LSCA funds managed by the State, particularly for expenses relating to multi-type region cooperative efforts.
- In addition, the following foundations have made grants available to libraries in Minnesota for non-automation activities:
  - Charles K. Blandon Foundation, Minneapolis, Minnesota
  - National Home Library, Washington, D.C.
  - St. Paul Foundation, Saint Paul, Minnesota
  - McKnight Foundation, Minnesota
  - Davis (Edwing W. & Kathryn M.) Foundation, Minnesota
  - Bremer (Otto) Foundation, Minnesota
  - Hill Family (Lewis W. & Maude) Foundation, Minnesota

At the Local Level

- We recommend review of current programs and activities with the objective of identifying staff or funding resources that might be redirected toward the conversion effort.
- Make special proposals and communications to your boards as part of the normal budgeting process to make funds available for this investment in a machine readable catalog conversion.
- Contact locally-based foundations regarding support of the project.
- Contact local banks or major businesses operating in your area regarding low interest "public service" loans or possible donations.

Task 2 - Contract for Conversion Services

Regions using OCLC for retrospective conversion will contract for OCLC services coordinating through MINITEX. OCLC will also be used for current cataloging.

Regions using MINI MARC for retrospective conversion should request a specific proposal for a one year rental of a MINI MARC system.

Task 3 - Weeding

Weeding of the collections is most important as it helps to reduce the cost and effort associated with the conversion. The following steps are appropriate. All regions should weed prior to conversion. Steps include:

(a) Establish weeding criteria, regarding age of material, physical condition, number of copies, etc.

(b) Set weeding goals of 5% to 20% for overall reductions with specific goals by subject area.

(c) Weed.

(d) Withdraw cards from the shelf list and catalog.

Task 4 - Organize the Conversion Project

Each region should organize to perform the conversion project. This would include planning a schedule for conversion, hiring temporary staff as needed, initial training in the tools and methods to be used and preparing space and facilities for the conversion project.

COORDINATION OF RETROSPECTIVE CONVERSION

Coordination will not be a problem for regions using OCLC for retrospective conversion. The main benefit of coordination is to share machine readable catalog records so that only one library needs to enter a full record. This will happen automatically for regions using OCLC.

Regions using MINI MARC for retrospective conversion can benefit from coordinating their conversions. The objective is to share machine readable records for titles held by more than one region but which are not on the MARC data base. This overlap of unique title could be 10-20% of titles held among three regions. By starting conversion at different points in their shelf lists and exchanging copies of diskettes with original input, the regions could provide each other with a second source of catalog records to supplement the MARC data base.

VENDOR EVALUATION AND SELECTION

Tasks required to prepare for installation of COM and online catalogs include the following:

Task 1 - Vendor Evaluation and Selection

The regional libraries involved would jointly develop specifications for the selection of a COM vendor. A set of specifications for the selection of a COM catalog vendor has been included as Appendix A of this report. In addition, copies of COM catalog Request for Proposals (RFPs) are available from a number of libraries that have gone through the process and have installed COM catalogs. Aside from the obvious specifications, e.g., content of the data base, format of the records, number of copies for each regional library, microfiche or roll film, nominal reduction ratio of microform, frequency of cumulations, cost, training, and the cut off date of data that will be reflected in the data base, an important consideration involves the track record of the vendor to produce the catalog in a timely and accurate manner.

It should take between 3-4 months to complete the process and select a vendor. Once the vendor has been selected, the vendor will provide the precise specifications necessary to develop the software to allow the communications terminal to handle the ordering of current machine readable records and enter the retrospective conversion "search arguments." The four regional libraries would then purchase the appropriate software from the communications terminal vendor - estimated at $5,000.

Potential vendors that should be sent a Request for Proposal include: Autographics, Brodart, Inforonics, Science Press and Northwest Micrographics.

Task 2 - Online Catalog Vendor Evaluation and Selection

The regional libraries planning on installing an online catalog/locator system can benefit by sharing information as they develop specifications. It should take 3 to 4 months to complete the process and select a vendor. Once selected, the vendor will provide installation assistance and advice. A list of potential vendors is given in Exhibit V-1.

Exhibit V-1
Library System Vendors

Name	Headquarters Location
Cincinnati Electronics	Cincinnati, Ohio
CL Systems, Inc. (CLSI)	Newtonville, Massachusetts
Computer Translation, Inc.	Provo, Utah
Dataphase Systems, Inc.	Kansas City, Missouri
GEAC	Markham, Ontario
Systems Control, Inc.	Palo Alto, California
Universal Library Systems	West Vancouver, British Columbia
Gaylord Library Systems	Syracuse, New York
IBM	Minneapolis, Minnesota

VI. CROW RIVER REGIONAL LIBRARY

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this section we have included relevant background data, conclusions and recommendations for the Crow River Regional Library. Our analysis of the alternatives is described in Sections I through IV.

BACKGROUND

Currently, Crow River maintains separate card files for the catalog, shelf list, on-order and locator files. Technical processing services are provided centrally. Card catalogs are maintained at Headquarters and at two other members with local and regional holdings. Other Branches do not maintain a regional catalog. The region does not have any machine-readable records for these files.

There is a need to improve the quality and acessibility of the catalog to all members and branches in the region. Creation and maintenance of the library card catalog and its related manual files, i.e. the shelf list, locator file, and on-order file, is labor-intensive and expensive. We also found that cost pressures have resulted in the quality of the current card catalogs to be relatively poor, reflecting inconsistent cataloging and a variety of catalog rules. There is a tendency for the quality of card catalogs to deteriorate over time, making it difficult for patrons to find what they want.

Crow River is seeking a cost-effective alternative to support the following objectives:

- Multiple access points to a regional union catalog with location entries in records from all members and branches;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

New forms of the catalog, maintained through machine-readable catalog records, offer substantial service benefits and increases in efficiency, partly through improved quality and partly by providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A card catalog.
- A Computer Output Microform or COM catalog.
- An online catalog, supported by a computer and acessible through computer terminals.
- Some combination of the above.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) versus current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

CONCLUSIONS

As a result of this study we are recommending that the Crow River Regional Library convert to catalogs in machine-readable form by methods that provide a reasonable trade-off of cost and quality. The result of this effort will be a higher quality union catalog accessible to all members and branches.

Our cost analysis evaluated of personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine-readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high. After the initial effort to convert the existing catalogs to machine-readable form, the personnel effort required to maintain the catalogs, and to use the catalogs, would be substantially reduced. The cost estimates and savings considered in this report only

represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements for savings in using machine-readable catalogs.

Based upon our analysis we have reached the following conclusions for Crow River:

Catalog Form -

In our opinion, the best alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large agencies, with COM catalogs in other branch libraries or agencies. However, we recommend that Crow River defer acquisition of an online catalog/locator system for several years and initially focus on developing a union COM catalog for the region, primarily due to the limited availability of funding and skilled technical staff.

Current Cataloging -

The needs and priorities of the six regional library systems are best satisified by current cataloging through OCLC, Inc. We rate MINI MARC next in terms of benefits but it is more expensive for you. Cataloging through a COM vendor is rated third in terms of benefits but it costs much less. We recommend OCLC for Crow River, because its initial costs are low and it provides some benefits of online access for Headquarters staff that justify its higher ongoing costs.

Retrospective Conversion -

For regions using OCLC for current cataloging, we recommend OCLC for retrospective conversion. Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. If Crow River uses a COM vendor for current cataloging, we would recommend using MINI MARC for retrospective conversion.

RECOMMENDATIONS

While our review indicates that an online catalog/locator file would be most desirable for Crow River, we recommend that Crow River initially plan on implementing a COM catalog while maintaining card files for the shelf list and locator files. General comments on the alternatives are given in Section IV. Cost estimates for Crow River are given in the exhibit on page VI-14.

We recommend the following approach to development of a machine readable catalog for the Crow River Regional Library:

- Review the status of others within your multi-type region and explore the opportunities for cooperative efforts such as a union COM catalog, processing center or shared computer system.
- Participate in the COM vendor evaluation and selection process with the other regional libraries.
- Perform the retrospective conversion in a one to two year effort using OCLC, Inc.
- Use OCLC for current cataloging support after conversion is complete. OCLC can also supply cards for the shelf list and locator files.
- After your multi-type region establishes a computer system for online catalog and circulation control, use this system as a headquarters online catalog and locator file. Keep COM catalogs in the branches.

We estimate that Crow River will need the following amounts to support this effort:

	Personnel	Non-Personnel	Total	
First year costs of retrospective conversion for personnel and non-personnel expenses	$38,000-$40,000	$27,000-$30,000	$65,000-$70,000	
Annual costs to support a COM Catalog	Staff effort reduced by 2.5 to 3.0 FTEs	$12,000-$15,000	$20,000-$25,000	Reduction

150

151

REGIONAL CHARACTERISTICS

Headquarters: Willmar Public Library

Primary population served (1970 census):	79,120
Expenditures (FY 79):	
Materials	$ 76,743
Total operating	$416,589
Number of agencies:	
Members	5
Branches	11
Bookmobiles	1
Materials (as of 12/11/79:	
Bookstock	213,532
Nonbook	5,537
Uncataloged	(34,600)
Cataloged	184,469

TECHNICAL SERVICES

Files

Public Catalog:

- Dictionary card file
- Maintained at HQ and 4 other members
- Includes local holdings of 5 members dating from before establishment of region
- Includes regional holdings
- Does not display location data

Shelf List:

- Card file
- Maintained at HQ for all holdings of agencies
- Separate HQ shelf list
- Separate local shelf lists at 4 other members including local holdings
- Does not display location data

Locator File:

- Card file in shelf list order
- Maintained at HQ
- Separate by agency

On-Order File:

- Card file in title order
- Maintained at HQ

Other Files:

- Shelf list of filmstrips and cassettes
- Listings of 8mm and 16mm films

- Card catalog of recordings

- Juvenile collection
  - Public catalog
  - Shelf List
  - Locator file
  - On-order file
  - Audio-visual shelf list

- Serials location list

Acquisitions Process

- Selection is coordinated by HQ with input from member librarians.

- Ordering and receiving are accomplished by HQ.

- Baker and Taylor is the most important source. Books are ordered processed, including catalog card sets, pockets, and plastic jackets.

Cataloging Process - see flowchart

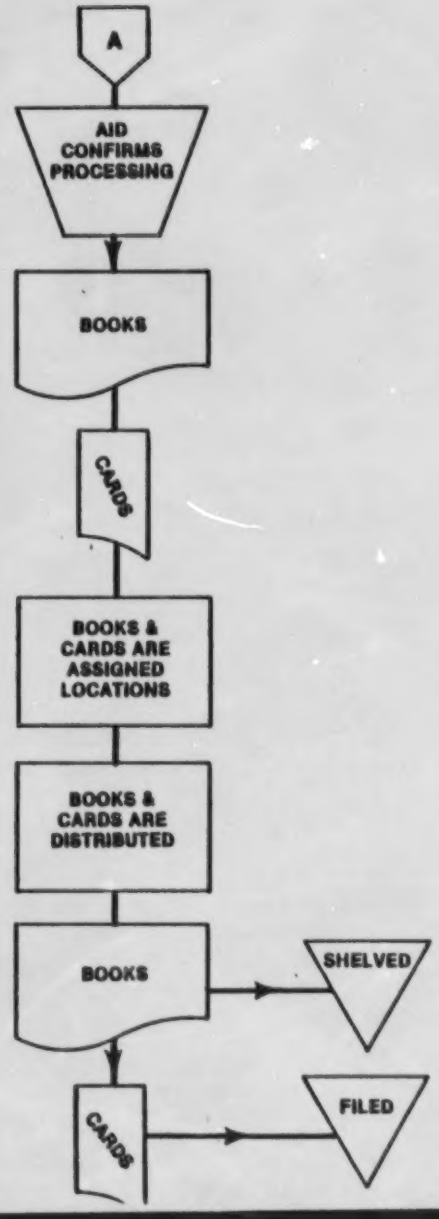
- Majority of books are received with catalog card sets.

- Original cataloging is done for unprocessed books. Cards are produced on copying machine from locally-typed master.

- Some categories of books are not cataloged:
  - mysteries
  - romances
  - westerns
  - most paperbacks

CATALOG STUDY ADVISORY GROUP
CROW RIVER REGIONAL LIBRARY
CATALOGING PROCEDURES

START
BOOKS ARRIVE
WEST, MYS, LGT. ROM. & PPR BACK DUPL. & NEW ED. SORTED FOR SHELF LIST
WESTERNS, MYSTERIES, LIGHT ROMANCES PAPERBACKS
DUPLICATES NEW ED.
DIRECTOR ASSIGNS OR VERIFIES CATALOGING
AIDE PRODUCES STENCILS FOR CATALOGING & SHELF LISTS
DIRECTOR ASSIGNS OR VERIFIES CATALOGING
PRE-PROCESSED CATALOG CARDS
STENCILS
AID PRODUCES CARDS ON COPYING MACHINE
SHELF LIST CARD
SHELF LIST CARDS ARE STAMPED W/ ACCESSION NOS.
CATA-LOG CARD
ADDIT. INFO. IS TYPED IF NECESSARY
CARDS ARE SORTED
A



CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: Crow River Regional Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
• Volumes (or Units)	213,532	600	859	4,078	N/A	N/A	184,469	34,600
• Titles	123,267	231	850	2,000			106,991	
Added (during 1979)								
• Volumes (or Units)	15,848		53	363	N/A	N/A	7,867	8,397
• Titles	6,130	15	50	350			N/A(1)	N/A
Current Record								
• Cataloged	Yes	No	No	Yes	No	No		
• Form								
- Card	Yes			Yes				
- Book or List								
Current Source(s)								
• Catalog Record Content								
- Jobber	75%							
- Original (your staff)	Yes			Yes				
- Other (please specify)	CIP							
• Catalog Cards								
- Jobber	75%							
- Your Staff	25%							
- Other (please specify)				Yes				

Note:

(1) An estimate of 4,563 titles added per year was used to calculate costs of cataloging alternatives.

CATALOG STUDY ADVISORY GROUP

Catalogs

Library or System: Crow River Regional Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	240	-	90	108	1	122,766	71,204	1,200	700
Branch/Member Catalogs	414	-	63	-	4	61,703	35,787	-	-
Totals	654	-	153	108	5	184,469	106,991	1,200	700

159

160

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

Library or System: Crow River Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	2.00	2.00	3.50	2.25	3.00	12.75
Agencies	1.00	5.25	4.50	11.10	3.50	25.35
Total	3.00	7.25	8.00	13.35	6.50	38.10
Avg. Salary/Hour	$6.73(1)	$5.29	$4.42	$3.30	$2.95	-
Benefits as % of Salary	13.5%	13.5%	13.5%	13.5%	13.5%	-
Avg. Salary + Benefits/Hour	$7.64	$6.00	$5.02	$3.75	$3.35	-

(1) Excluding Director

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: Crow River Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	0.20	0.20	0.20	0.20	-	0.80
Catalog Maintenance	-	0.25	0.35	0.50	-	1.10
Locator File Maintenance	0.10	-	-	0.40	-	0.50
Shelf List Maintenance	-	-	0.10	1.50	-	1.60
On-Order File Maintenance	0.05	0.05	0.15	-	-	0.25
Total	0.35	0.50	0.80	2.6	-	4.25

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: Crow River Regional Library

Vendor Name	Description of Supplies or Services	Amount
1. Baker and Taylor	Catalog cards (sets)	$2,790
2. Gaylord Bros.	Location file cards	98
3. Gaylord Bros.	Catalog cards	868
4. Gaylord Bros.	Stencils & supplies	720
5. Typewriter shop	Ribbons and other accessories	50
	Total	$4,525

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: Crow River Regional Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging	$ 200	$4,525		$11,365	$16,090	
Catalog Maintenance				10,675	10,675	
- Union Catalog	300				300	
- Branch Catalogs	600				600	
Locator File Maintenance	200			4,709	4,909	
Shelf List Maintenance	300			12,744	13,044	
On-Order File Maintenance		200		2,985	3,185	
Total	$ 1,600	$4,725		$42,478	$48,803	$6.20

Estimated Personnel Time and Cost for Each Alternative

Library or System: Crow River (Total)

	Est. Cost per FTE-HR	Present Method		Online System		Com Vendor		OCLC, Inc.		Mini-Marc	
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarians - MLS	7.64	.15	2,384	.05	795	.15	2,384				
- BA/BS	6.00	.30	3,744	.05	624	.05	624				
Technical Assistant	5.02	.60	6,265	.15	1,566	.15	1,566				
Clerical	3.75	2.40	18,720	-	-	.40	3,120				
Other	3.35	-	-	-	-	-	-				
Total		3.45	31,113	.25	2,985	.75	7,694				
Current Cataloging											
Librarians - MLS		.20	3,178			.05	795	.04	636	.04	636
- BA/BS		.20	2,496			-	-	-	-	-	-
Technical Assistant		.20	2,088			.16	1,670	.18	1,879	.10	1,044
Clerical		.20	1,560			-	-	-	-	-	-
Other		-	-			-	-	-	-	-	-
Total		.80	9,322			.21	2,465	.22	2,515	.14	1,680
Retrospective Conversion(1)											
Librarians - MLS						.80	12,713	.50	7,946	.50	7,946
- BA/BS						-	-	-	-	-	-
Technical Assistant						2.00	20,883	2.50	26,104	2.00	20,883
Clerical						1.00	7,800	.60	4,680	-	-
Other						-	-	-	-	-	-
Total						3.80	41,396	3.60	38,730	2.50	28,829

Note:

(1) Does not include weeding or a physical inventory

Comparison of Total Estimated Costs

Library or System: Crow River

	Present Method	Online Catalog(2)	COM Vendor(3)	OCLC and COM(4)	MINI MARC and COM(5)	MINI MARC (Retro only) and COM(5)	Online Hdqtr COM Branches(6)	Online Hdqtrs COM Branches and OCLC(7)	Online Hdqtrs COM Branches MINI MARC(8)
				Initial Costs					
Catalog and File Maintenance									
Initial costs		$ 305,625	11,490	11,490	11,490	11,490	132,661	132,661	132,661
Five years of annual costs:									
- Non-personnel	$ 8,000	220,750	73,220	73,220	73,220	73,220	129,970	129,970	129,970
- Personnel(10)	155,565	14,925	38,470	38,470	38,470	38,470	14,925	14,925	14,925
Total	163,565	541,300	123,180	123,180	123,180	123,180	277,556	277,556	277,556
Current Cataloging									
Initial costs	-		7,350	3,948	45,050	7,350	7,350	3,948	7,350
Five years of annual costs:									
- Non-personnel	23,625		5,725	45,998	45,250	5,725	5,725	45,998	5,725
- Personnel(10)	46,610		12,325	12,575	8,400	12,325	12,325	12,575	12,325
Total	70,235	(9)	25,400	65,521	98,700	25,400	25,400	65,521	25,400
Retrospective Conversion									
Initial costs:									
- Non-personnel			34,198	19,576	23,700	23,700	34,198	19,576	23,700
- Personnel(10)			41,396	38,730	28,829	28,829	41,396	38,730	28,829
Total		(9)	75,594	58,306	52,529	52,529	75,594	58,306	52,529
Combined Net Cost(1)									
- Non-personnel	-		21,999	28,606	56,690	42,540	143,049	149,656	163,711
- Personnel(10)	-		41,396	38,730	28,829	28,829	41,396	38,730	28,829
Five years of annual costs:									
- Non-personnel	31,625		75,095	119,218	118,470	75,095	133,845	175,968	133,845
- Personnel(10)	202,175		50,795	45,998	46,870	50,795	27,250	27,500	27,250
Total Five Years	233,800	(9)	189,285	232,552	250,859	197,259	345,540	391,854	353,635
Average Per Year - Initial & Annual	46,760		37,857	46,510	50,171	39,452	69,108	78,371	70,727
Average Annual Costs	46,760		25,178	33,043	33,068	25,178	32,219	40,694	32,219
Initial Costs	-		63,395	67,366	85,519	71,369	184,445	188,386	192,540

Note:

(1) Consideration of discounts, operating efficiencies, processing steps avoided, and interfaces required makes Net Cost less than a simple total.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibit II-3, II-5 and II-13.
(8) Source of data: Exhibits II-3, II-11, II-13.
(9) Choice of the cataloging method and source is left to the region; costs vary accordingly.
(10) Source of data: Exhibit III-4.

VII. EAST CENTRAL REGIONAL LIBRARY

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this section we have included relevant background data, conclusions and recommendations for the East Central Regional Library. Our analysis of the alternatives is described in Sections I through IV.

BACKGROUND

Currently, East Central maintains separate card files for the catalog, shelf list, and locator files. Copies of order forms are kept in an on-order file. Technical processing services are provided centrally. A card catalog is maintained at Headquarters with local and regional holdings. Other branches do not maintain a regional catalog. The region does not have any machine-readable records for these files.

There is a need to improve the quality and acessibility of the catalog to all agencies in the region. Creation and maintenance of the library card catalog and its related manual files, i.e. the shelf list, locator file, and on-order file, is labor-intensive and expensive. We also found that cost pressures have resulted in the quality of the current card catalogs to be relatively poor, reflecting inconsistent cataloging and a variety of catalog rules. There is a tendency for the quality of card catalogs to deteriorate over time, making it difficult for patrons to find what they want.

East Central is seeking a cost-effective alternative to support the following objectives:

- Multiple access points to a regional union catalog with location entries in records from all members and branches;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

New forms of the catalog, maintained through machine-readable catalog records, offer substantial benefits and possible increases in efficiency, partly through improved quality and partly by providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A card catalog.
- A Computer Output Microform or COM catalog.
- An online catalog, supported by a computer and accessible through computer terminals.
- Some combination of the above.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) versus current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

As a result of this study we are recommending that the East Central Regional Library convert to catalogs in machine-readable form by methods that provide a reasonable trade-off of cost and quality. The result of this effort will be a high quality union catalog accessible to all members and branches.

Our cost analysis evaluated personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine-readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high. After the initial effort to convert the existing catalogs to machine-readable form, the personnel effort required to maintain the catalogs, and to use the catalogs, would be substantially reduced. The cost estimates and savings considered in this report only represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements or savings in using machine-readable catalogs.

Based upon our analysis we have reached the following conclusions for East Central:

Catalog Form -

In our opinion, the best alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large agencies, with COM catalogs in the other branch libraries or agencies. We recommend that East Central install an online catalog/locator system shortly after developing a union COM catalog for the region. As 95% of the collections rotate, automating the locator file would be very beneficial.

Current Cataloging -

We recommend cataloging through a COM vendor for East Central.

The needs and priorities of the six regional library systems are best satisfied by current cataloging through OCLC, Inc. We rate MINI MARC next in terms of benefits, but it is more expensive for you. Cataloging through a COM vendor is rated third in terms of benefits, but it is much less expensive. Given that you install an online catalog/locator system, using OCLC's online cataloging service would be redundant in some ways. Therefore, we recommend the less expensive alternative.

Retrospective Conversion -

We recommend MINI MARC for East Central's retrospective conversion.

Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. For regions using OCLC for current cataloging, we recommend OCLC for retrospective conversion. We recommend using MINI MARC for retrospective conversion with a COM vendor for current cataloging because it provides some of the benefits of online cataloging during the retrospective conversion. Benefits include efficiency and reduction of paper work.

RECOMMENDATIONS

Based upon our study, we conclude that the most attrative alternative for East Central Regional Library is an online catalog/locator file for headquarters staff combined with COM catalogs for public access in all branch libraries. We recommend that East Central Regional Library being retrospective conversion with MINI MARC, while maintaining the card catalog, shelf list and locator files. Once the online and COM catalogs are established, continue current cataloging through a COM vendor. Additional discussion of the alternatives is given in Section IV.

We recommend that you review the status of others in your Minnesota Multi Type Region and explore opportunities for cooperative efforts, such as a shared computer system, once your retrospective conversion is initiated.

Retrospective conversion will take a year or longer. During this time you will be able to plan for funding, selection and installation of the online catalog/locator system and the COM catalog. There is no need to purchase an online catalog/locator system until the conversion is nearly complete.

Costs are presented in the exhibit on page VII-14.

We estimate that East Central will need the following amounts to support this effort:

	Personnel	Non-Personnel	Total
First year costs of retrospective conversion for personnel and non-personnel expenses	$28,000-$31,000	$18,000-$23,000	$46,000-$64,000
Second year costs of initiating COM and online catalogs		$120,000-$130,000	$120,000-$130,000
Additional annual costs	Staff effort reduced by 1.2 FTEs	$28,000-$31,000	$17,000-$19,000 Increase

REGIONAL CHARACTERISTICS

Headquarters: Cambridge Public Library

Primary population served (1970 census):	87,167
Expenditures (FY 79):	
Materials	$ 77,160
Total operating	$395,542
Number of agencies:	
Branches	10
Bookmobiles	2
Materials (as of 12/31/79:	
Bookstock	100,808
Nonbook	3,244
	104,327

TECHNICAL SERVICES

Files

Public Catalog:

- Dictionary card file
- Maintained at HQ
- Includes holdings of HQ
- Includes regional holding except those of 2 agencies
- In 2 agencies, catalogs of local holdings are maintained
- Does not display location data

Shelf List:

- Card file
- Maintained at HQ
- Includes same holdings as HQ public catalog
- Displays location data for the few books which are permanently assigned to an agency

Locator File:

- Card file in shelf list order
- Maintained at HQ
- Separate by agency
- Includes same holdings as HQ public catalog

On-Order File:

- Copy of multi-part order form in title order
- Maintained at HQ
- Subdivided into Orders Out and Orders Received
- Identical file is maintained at HQ circulation desk

Other Files:

- Temporary Loan file consisting of Locator File cards
- A-V authority file, locator file

Acquisitions Process

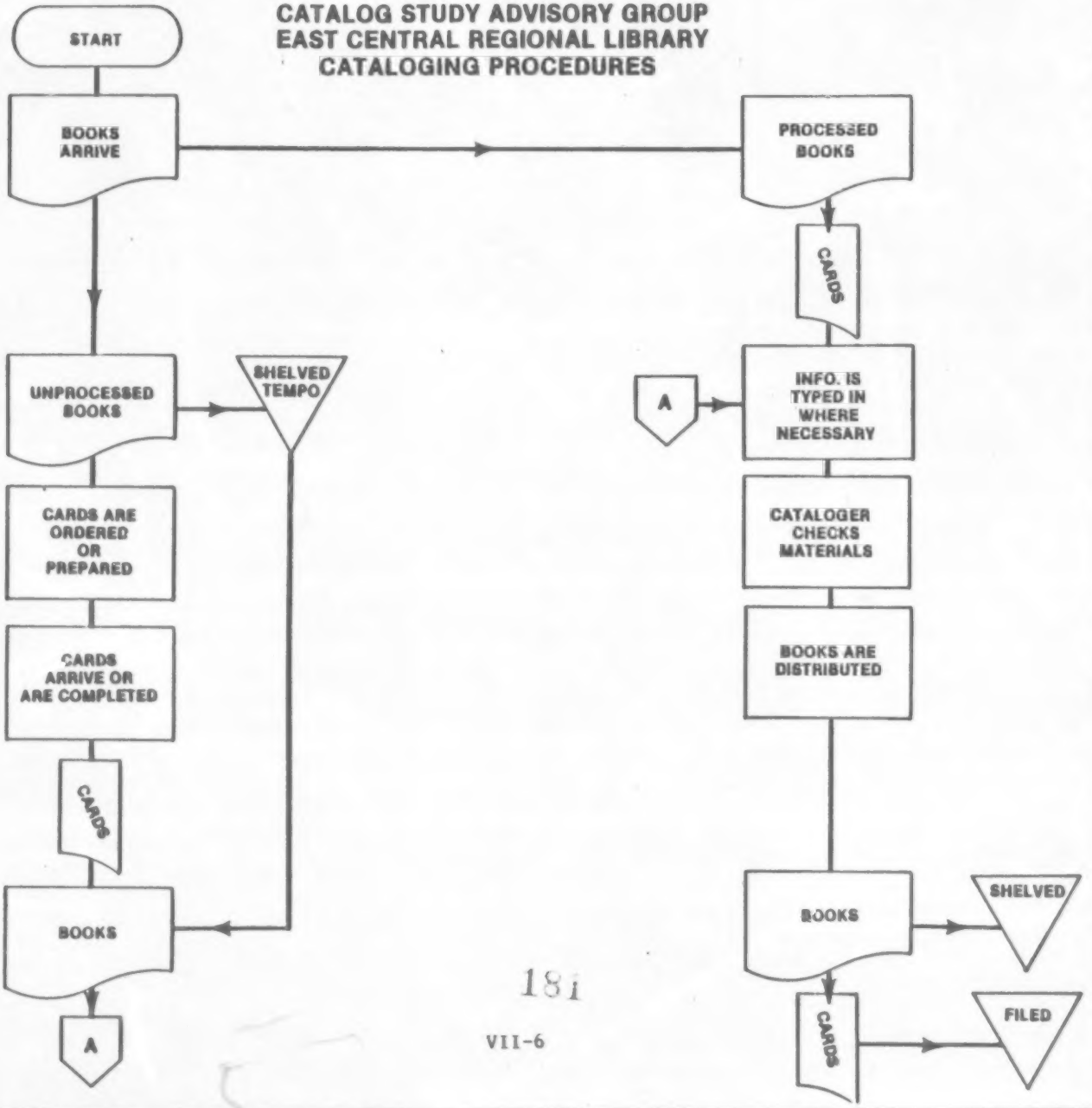
- Selections are made by HQ
- Ordering and receiving are accomplished by HQ
- Two exceptions to these general procedures exist. Two agencies make their own purchases with their own funds. These are the same agencies which maintain separate local catalogs

Cataloging Process

- Majority of books (estimate 80%) are received with catalog card sets.
- Staff does original cataloging for unprocessed books. Cards are individually typed.
- Most paperbacks are not cataloged.

Rotating Collection Procedures

- Estimated 95% of the total regional holdings rotates among the agencies, including HQ.
- Each agency receives 45 books per week
- Locator file provides control over rotating collections


CATALOG STUDY ADVISORY GROUP
EAST CENTRAL REGIONAL LIBRARY
CATALOGING PROCEDURES
START
BOOKS ARRIVE
PROCESSED BOOKS
CARDS
UNPROCESSED BOOKS
SHELVED TEMPO
A
INFO. IS TYPED IN WHERE NECESSARY
CARDS ARE ORDERED OR PREPARED
CATALOGER CHECKS MATERIALS
CARDS ARRIVE OR ARE COMPLETED
BOOKS ARE DISTRIBUTED
CARDS
BOOKS
SHELVED
A
BOOKS
CARDS
FILED

CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: East Central Region Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
o Volumes (or Units)	100,808		275	3,244	N/A	N/A	104,327	-
o Titles	N/A	150	246				80,000(2)	150
Added (during 1979)								
o Volumes (or Units)	5,828(1)		36	280			6,144(1)	2
o Titles	2,778	2	31	280			3,101	
Current Record								
o Cataloged	Yes	No	Yes	Yes	No	No		
o Form								
- Card	Yes		Yes	Yes				
- Book or List								
Current Source(s)								
o Catalog Record Content								
- Jobber	80%			65%				
- Original (your staff)	20%		100%	35%				
- Other (please specify)								
o Catalog Cards								
- Jobber	80%			65%				
- Your Staff	20%		100%	35%				
- Other (please specify)								

Notes:

(1) Includes 4,000 volumes owned and cataloged by Library which joined ECRL. Typical annual acquisitions for ECRL are approximately 4,000 lower than in 1979.

(2) Estimated titles cataloged is 80,000.

CATALOG STUDY ADVISORY GROUP

Catalogs

Library or System: East Central Regional Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	183	-	120	48	2	104,327	N/A	250	200
Branch/Member Catalogs (1)	-	-	-	-	-	-	-	-	-
Totals	183	-	120	48	2	104,327	N/A	250	200

Note

1) Two branches maintain some form of card catalog. Size and quality unknown.

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-Time Equivalent Personnel)

Library or System: East Central Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	3.00	1.00	-	7.675	2.50	14.175
Agencies	-	7.97	-	0.25	1.50	9.72
Total	3.00	8.97	-	7.925	4.00	23.895
Avg. Salary/Hour	$6.53(1)	$4.83/4.19(2)	-	$3.69	$4.28(3)	-
Benefits as % of Salary	14.33%	14.62/15.05%	-	15.45%	14.83%	-
Avg. Salary + Benefits/Hour	$7.62	$5.54/4.82	-	$4.26	$4.92	-

(1) Excluding Director.
(2) Salary range differs substantially between Central Services and Agencies.
(3) Includes secretary, janitor, and drivers. Does not include page.

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: East Central Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	-	0.255	-	0.38	-	0.635
Catalog Maintenance	-	0.235	-	0.10	-	0.335
Locator File Maintenance	-	-	-	0.45	-	0.45
Shelf List Maintenance	-	0.08	-	-	-	0.08
On-Order File Maintenance	-	-	-	0.40	-	0.40
Total	-	0.57	-	1.33	-	1.90

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: East Central Regional Library

Vendor Name	Description of Supplies or Services	Amount
1. Baker & Taylor/Brodart	Catalog card kits	$1,381
2. Brodart	Order forms	147
3. Brodart	Cards	53
4. Baker & Taylor	Processing	439
	Total	$2,020

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: East Central Regional Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$460	$1,381	$ 6,301	$ 8,142	
Catalog Maintenance - Union Catalog - Branch Catalogs				3,595	3,595	
Locator File Maintenance		32		3,987	4,019	
Shelf List Maintenance				920	920	
On-Order File Maintenance		147		3,544	3,691	
Total	-	$639	$1,381	$18,347	$20,367	$4.27

Estimated Personnel Time and Cost for Each Alternative

Library or System: East Central (Total)

	Est. Cost per FTE-HR	Present Method		Online System		Com Vendor		OCLC, Inc.		Mini-Marc	
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarians - MLS	7.62	-	-	-	-	-	-				
- BA/BS	5.54	.315	3,630	-	-	-	-				
Technical Assistant	4.92	-	-	-	-	-	-				
Clerical	4.26	.950	8,418	.40	3,544	.85	7,532				
Other	4.92	-	-	-	-	-	-				
Total		1.265	12,048	.40	3,544	.85	7,532				
Current Cataloging											
Librarians - MLS		-	-			-	-	-	-	-	-
- BA/BS		.255	2,936			.04	425	.03	319	.03	319
Technical Assistant		-	-			-	-	-	-	-	-
Clerical		-	3,365			.11	900	.13	1,063	.06	491
Other		.380	-			-	-	-	-	-	-
Total		.635	6,301			.15	1,325	.16	1,382	.09	810
Retrospective Conversion(1)											
Librarians - MLS						-	-	-	-	-	-
- BA/BS						.50	3,762	.40	4,609	.40	4,609
Technical Assistant						1.60	16,373	1.90	19,839	1.50	15,662
Clerical						.70	6,202	.40	3,544	-	-
Other						-	-	-	-	-	-
Total						2.80	28,337	2.70	27,993	1.90	20,271

Note:

(1) Does not include weeding or a physical inventory

Comparison of Total Estimated Costs

Library or System: East Central

		Alternatives							
	Present method	Online catalog(2)	COM vendor (3)	OCLC and COM (4)	MINI MARC and COM (5)	MINI MARC (Retro Only) and COM (5)	Online Hdqtrs COM Branches (6)	Online Hdqtrs/ COM Branches and OCLC (7)	Online Hdqtrs/ COM Branches MINI MARC (8)
Catalog and File Maintenance									
Initial costs		$ 290,925	9,600	9,600	9,600	9,600	123,150	123,150	123,150
Five years of annual costs:									
- Non-personnel	$ 885	195,600	53,645	53,645	53,645	53,645	129,970	129,970	129,970
- Personnel(10)	60,240	17,720	37,660	37,660	37,600	37,600	17,720	[illegible]	17,720
Total	61,125	504,245	100,905	100,905	100,905	100,905	270,840	270,840	270,840
Current Cataloging									
Initial costs	-		7,350	3,948	45,050	7,350	7,350	3,948	7,350
Five years of annual costs:									
- Non-personnel	9,205		3,970	35,201	45,250	3,970	3,970	35,201	3,970
- Personnel(10)	31,505		6,625	6,910	4,050	6,625	6,625	6,910	6,625
Total	40,710	(9)	17,945	46,059	94,350	17,945	17,945	46,059	17,945
Retrospective Conversion									
Initial costs:									
- Non-personnel			27,450	17,738	23,700	23,700	27,450	17,728	23,700
- Personnel(10)			28,337	27,992	20,271	20,271	28,337	27,992	20,271
Total		(9)	55,787	45,730	43,971	43,971	55,787	45,730	43,971
Combined Net Cost(1)									
Initial costs:									
- Non-personnel			19,300	24,908	54,800	40,650	132,850	138,458	154,200
- Personnel(10)			28,337	27,992	20,271	20,271	28,337	27,992	20,271
Five years of annual costs:									
- Non-personnel	10,090		56,280	88,846	98,895	56,280	132,605	165,171	132,605
- Personnel(10)	91,745		44,285	44,570	41,710	44,285	24,345	24,630	24,345
Total Five Years	101,835	(9)	148,202	186,316	215,676	161,486	318,137	356,251	331,421
Average Per Year -									
Initial & Annual	20,367		29,640	37,263	43,135	32,297	63,627	71,250	66,284
Average Annual costs	20,367		20,113	26,683	28,121	20,113	31,390	37,960	31,390
Initial Costs	-		47,637	52,900	75,071	60,921	161,187	166,450	174,471

Note:

(1) Consideration of discounts, operating efficiencies, processing steps avoided, and interfaces required make Net Cost less than a simple total.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8.
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibit II-3, II-8 and II-13.
(8) Source of data: Exhibit II-3, II-11, II-13.
(9) Choice of cataloging method and source is left up to the region; costs vary accordingly.
(10) Source of Data: Exhibit III-4.

VIII. KITCHIGAMI REGIONAL LIBRARY

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this section we have included relevant background data, conclusions and recommendations for the Kitchigami Regional Library. Our analysis of the alternatives is described in Sections I through IV.

BACKGROUND

Currently, Kitchigami maintains separate card files for the catalog, shelf list, on-order and locator files. Technical processing services are provided centrally. The region does not have any machine readable records for these files. Kitchigami does not have a union catalog including region-owned and locally owned materials; separate card catalogs are maintained.

There is a need to improve the quality and accessibility of the catalog to all members branches in the region. Creation and maintenance of the library card catalog and its related manual files, i.e. the shelf list, locator file, and on-order file, is labor-intensive and expensive. We also found that cost pressures have resulted in the quality of the current car catalogs to be relatively poor, reflecting inconsistent cataloging and a variety of catalog rules. There is a tendency for the quality of card catalogs to deteriorate over time, making it difficult for patrons to find what they want.

Kitchigami is seeking a cost-effective alternative to support the following objectives:

- Multiple access points to a regional union catalog with location entries in records from all members and branches;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

New forms of the catalog, maintained through machine readable catalog records offer substantial service benefits and possible increases in efficiency, partly through improved quality and partly by providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A card catalog.
- A Computer Output Microform or COM catalog.
- An online catalog, supported by a computer and accessible through computer terminals.
- Some combination of the above.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) versus current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

CONCLUSIONS

As a result of this study we are recommending that the Kitchigami Regional Library convert to catalogs in machine-readable form by methods that provide a reasonable trade-off of cost and quality. The result of this effort will be a high quality union catalog accessible to all members and branches.

Our cost analysis evaluated personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine-readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high. After the initial effort to convert the existing catalogs to machine-readable form, the personnel effort required to maintain the catalogs, and to use the catalogs, would be substantially reduced. The cost estimates and savings considered in this report only represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements or savings in using machine-readable catalogs.

Based upon our analysis we have reached the following conclusions for Kitchigami:

Catalog Form -

In our opinion, the best alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large agencies, with COM catalogs in the other branch libraries or agencies. However, we recommend that Kitchigami defer acquisition of an online catalog/locator system for several years and initially focus on developing a union COM catalog for the region, primarily due to the limited availability of funding and skilled technical staff.

Current Cataloging -

The needs and priorities of the six regional library systems are best satisified by current cataloging through OCLC, Inc. We rate MINI MARC next in terms of benefits. Cataloging through a COM vendor is rated third in terms of benefits. We recommend OCLC for Kitchigami because its initial costs are lowest and because it provides some benefits of online access for Headquarters staff that justify the ongoing costs.

Retrospective Conversion -

Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. For regions using OCLC for current cataloging, we recommend OCLC for retrospective conversion.

RECOMMENDATIONS

While our review indicates that an online catalog/locator file would be most desirable for Kitchigami, we recommend that you initially plan on implementing a COM catalog while maintaining card files for shelf list, locator and on-order files. We also recommend using OCLC for retrospective conversion and cataloging. Additional discussion of the alternatives is given in Section IV.

Kitchigami Regional Library is in the same Minnesota multi-type region as three of the other regional libraries in this study and should continue to cooperate with these libraries in planning, converting and maintaining machine readable catalogs. We recommend the following approach for the Kitchigami Regional Library.

- Participate in the COM vendor evaluation and selection process with the other regional libraries.
- Plan on implementing a COM catalog for your regional library while maintaining card files for shelf list and locator files and a manual on order file.
- Plan on performing retrospective conversion in a one-year effort using OCLC.
- Plan on performing current cataloging using OCLC. OCLC can also be used to supply cards for your shelf list and locator files.
- After the retrospective conversion is complete, the OCLC terminal can also be used by your headquarters for reference, ILL checking and pre-acquisition checking.
- If OCLC cannot accommodate satisfactorily your needs, use MINI MARC as a substitute in your processing center for retrospective conversion and use a COM vendor for current cataloging.

- In several years, review the option to join with the other libraries in your multi-type region to establish a shared online catalog and circulation control system. Use this system as a headquarters online catalog and locator file. Keep COM catalogs in the branches.

Cost estimates for the alternatives are given in the exhibit on page VIII-14.

We estimate that Kitchigami will need the following amounts to support the effort based on your share of costs:

	Personnel	Non-Personnel	Total
First year costs of retrospective conversion	$17,000-$19,000	$12,000-$14,000	$29,000-$33,000
Additional annual costs to support a COM catalog	Staff effort reduced by 1.2 to 1.5 FTEs	$13,000-$15,000	$4,000-$5,000 Increase

REGIONAL CHARACTERISTICS

Headquarters: Pine River Public Library	
Primary population served (1970 census):	87,683
Expenditures (FY 79):	
Materials	$ 24,145
Total operating	$309,546
Number of agencies:	
Branches	8
Bookmobiles	1
Materials (as of 12/31/79):	
Bookstock	77,297
Nonbook	2,322
Uncataloged	(1,321)
Cataloged	78,298(1)

Note:

(1) Region-owned materials only. Total bookstock including locally-owned materials is 165,683.

TECHNICAL SERVICES

Files

Public (Union) Catalog:

- Dictionary card file
- Maintained at Pine River
- Includes only Kitchigami-owned materials
- Does not include locally-owned materials housed at member libraries
- Separate catalog of recordings
- Does not display location data
- Includes vertical subject headings interfiled
- A copy of multi-part form is filed in the catalog by title

Shelf List:

- Card file
- Maintained in Pine River for all region-owned materials
- Does not display location data
- Some agencies maintain shelf list of local holdings

Locator File:

- Card file in shelf list order
- Maintained in Pine River (HQ)
- Separate by agency

On-Order File:

- Copy of multi-part order form in title order
- Maintained in Pine River (HQ)

Other Files:

- One-Issue File includes Locator File card for books on loan from one agency to another.
- Each agency has a card catalog which contains locally-owned materials and Kitchigami region-owned materials housed at that agency.

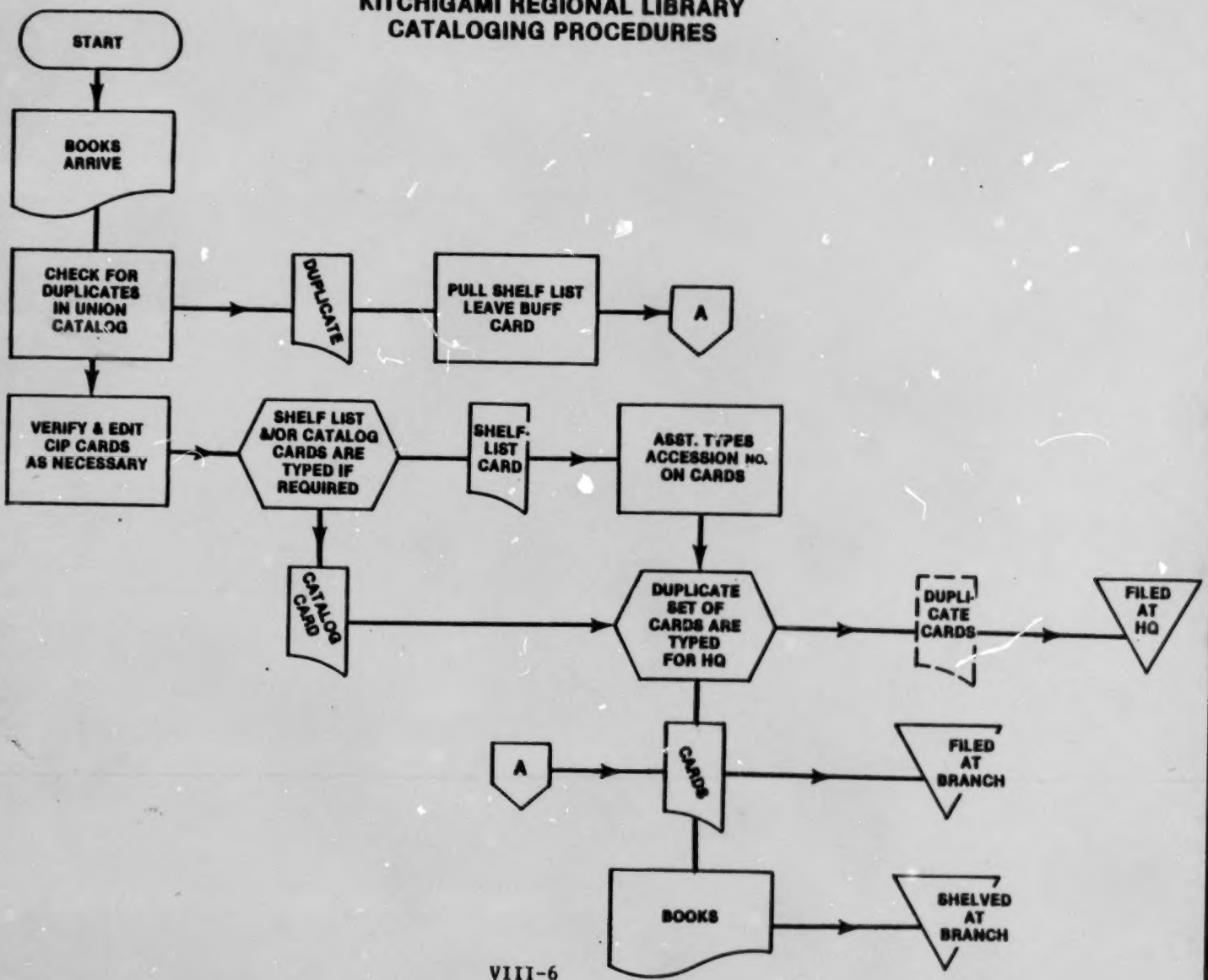
Acquisitions Process

- Selections are made in Pine River (HQ) from requests and recommendations by agency staff and others
- Orders are prepared by a volunteer in Pine River (HQ)

Cataloguing Process - see flowchart

- Estimated 70% of books purchased in 1980 are received with catalog cards. In 1979, fewer than 10% of purchased from Baker and Taylor had catalog cards.
- If original or copy cataloging is performed locally, all cards are typed individually
- Some paperbacks are cataloged. Many gift paperbacks are processed by staff in each agency.

CATALOG STUDY ADVISORY GROUP
KITCHIGAMI REGIONAL LIBRARY
CATALOGING PROCEDURES



CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: Kitchigami Regional Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
o Volumes (or Units)	77,297		1,321	1,001			78,298	1,321
o Titles	16,106(1)		710	N/A			N/A(2)	N/A
Added (during 1979)								
o Volumes (or Units)	5,399			105			5,504	-
o Titles	3,409			105			3,514	-
Current Record								
o Cataloged	Yes			Yes				
o Form								
- Card	Yes							
- Book or List								
Current Source(s)								
o Catalog Record Content								
- Jobber	70%							
- Original (your staff)	30%							
- Other (please specify)								
o Catalog Cards								
- Jobber	70%							
- Your Staff	30%							
- Other (please specify)								

Note:

(1) Began counting titles 1/1/74

(2) Estimated 50,000 titles of region-owned materials

CATALOG STUDY ADVISORY GROUP

Catalogs

Library or System: Kitchigami Regional Library

	Estimated Number of Card Drawers In Use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On Order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	144	-	63	117	2	78,298	16,106(1)	915	701
Branch/Member Catalogs	259	24	61	-	1	-	-	-	-
Totals	403	24	124	117	3	78,298	16,106	915	701

Note

(1) Partial count of titles, since 1/1/74 only. Estimated total is 50,000 titles.

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

Library or System: Kitchigami Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	1.00	-	-	5.53	1.00(1)	7.53
Agencies	1.00	-	-	14.51	1.46	16.97
Total	2.00	-	-	20.04	2.46	24.50
Avg. Salary/Hour	6.87(2)	-	-	3.19	4.41	-
Benefits as % of Salary	10.4%	-	-	11.28%	8.75%	-
Avg. Salary + Benefits/Hour	$7.59	-	-	$3.55	$4.80	-

(1) Volunteers
(2) Excludes Director

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: Kitchigami Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	-	-	-	1.646	-	1.646
Catalog Maintenance	-	-	-	0.10	-	0.10
Locator File Maintenance	-	-	-	0.08	-	0.08
Shelf List Maintenance	-	-	-	0.025	-	0.025
On-Order File Maintenance	-	-	-	-	0.25(1)	0.25
Total	-	-	-	1.851	0.25	2.101

(1) Volunteer

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: Kitchigami Regional Libary

Vendor Name	Description of Supplies or Services	Amount
1. Gaylord Bros.	Order forms	$ 202
2. Baker & Taylor	Card sets	161
3. Gaylord Bros./ Local printer	Catalog cards	159
	Total	$ 522(1)

Note:

(1) Other supplies not directly for cataloging and file maintenance include circ. book cards ($26.50), record cases ($113.75), book pockets ($76.15).

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: Kitchigami Regional Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$159	$161	$12,155	$12,475	
Catalog Maintenance - Union Catalog - Branch Catalogs				738	738	
Locator File Maintenance				589	589	
Shelf List Maintenance				185	185	
On-Order File Maintenance		202		-	202	
Total	-	$361	$161	$13,667	$14,189	$2.58

Estimated Personnal Time and Cost for Each Alternative

Library or System: Kitchigami (Total)

	Est. Cost per FTE-HR	Present Method		Online System		Com Vendor		OCLC, Inc.		Mini-Marc	
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarian - MLS	7.54	-	-	-	-	-	-				
- BA/BS	-	-	-	-	-	-	-				
Technical Assistant	4.80	-	-	-	-	-	-				
Clerical	3.55	.205	1,514	-	-	.08	591				
Other	4.80	.250	- (1)	.25	2,496	.25	2,496				
Total		.455	1,514	.25	2,496	.33	3,087				
Current Cataloging											
Librarian - MLS		-	-			.03	474	.03	474	.02	316
- BA/BS		-	-			-	-	-	-	-	-
Technical Assistant		-	-			-	-	-	-	-	-
Clerical		-	-			.13	960	.14	1,034	.08	591
Other		1.646	12,155			-	-	-	-	-	-
Total		1.646	12,155			.16	1,434	.17	1,508	.10	907
Retrospective Conversion											
Librarian - MLS						.40	6,315	.30	4,737	.30	4,736
- BA/BS						-	-	-	-	-	-
Technical Assistant						1.00	9,984	1.00	9,984	.90	8,986
Clerical						.45	3,323	.40	2,954	.-	-
Other						-	-	-	-	-	-
Total						1.85	19,622	1.70	17,675	1.20	13,722

Note:

(1) Unpaid volunteer valued at $2,496 per year

Comparison of Total Estimated Costs

Library or System: Kitchigami

		Alternatives							
	Present method	Online catalog(2)	COM vendor (3)	OCLC and COM (4)	MINI MARC and COM (5)	MINI MARC (Retro Only) and COM(6)	Online Hdqtrs COM Branches (6)	Online Hdqtrs/ COM Branches and OCLC (7)	Online Hdqtrs/ COM Branches MINIMARC (8)
Catalog and File Maintenance									
Initial costs		$ 270,725	5,900	5,900	5,900	5,900	111,950	111,950	111,950
Five years of annual costs:									
- Non-personnel	$ 1,010	159,150	32,780	32,780	32,780	32,780	82,530	82,530	82,530
- Personnel(11)	7,570(10)	12,480	15,435	15,435	15,435	15.435	12,435	12,435	12,435
Total	8,580	442,355	54,115	54,115	54,115	54,115	206,915	206,915	206,915
Current Cataloging									
Initial costs	-		7,350	3,948	45,070	7,350	7,350	3,948	7,350
Five years of annual costs:									
- Non-personnel(11)	1,600		4,465	38,250	45,230	4,465	4,465	38,250	4,465
- Personnel	60,775		7,170	7,540	4,535	7,170	7,170	7,540	7,170
Total	62,375	(9)	18,985	49,738	94,785	18,985	18,985	49,738	18,985
Retrospective Conversion									
Initial costs:									
- Non-personnel			19,950	9,958	23,700	23,700	19,950	9,958	23,700
- Personnel(11)			19,622	17,675	13,722	13,722	19,622	17,675	13,722
Total		(9)	39,572	27,633	37,422	37,422	39,572	27,633	37,422
Combined Net Cost(1)									
Initial costs:									
- Non-personnel	-		22,050	12,452	51,000	36,950	120,750	111,152	143,000
- Personnel(11)	-		19,622	17,675	13,722	13,722	19,622	17,675	13,722
Five years of annual costs:									
- Non-personnel	2,610		35,765	71,030	78,030	35,765	85,515	120,780	85,515
- Personnel(11)	68,345		22,605	22,975	19,970	22,605	19,605	19,975	19,605
Total Five Years	70,955	(9)	100,042	124,132	162,722	109,042	245,492	269,582	261,842
Average Per Year - Initial & Annual	14,191(10)		20,008	24,826	32,544	21,808	49,098	53,916	52,368
Average Annual Costs	14,191		11,674	18,801	19,600	11,674	21,024	28,151	21,024
Initial Costs	-		41,672	30,127	64,722	50,762	140,372	128,827	156,722

Note:

(1) Consideration of discounts, operating efficiencies, processing steps avoided, and interfaces required makes Net Cost less than a simple total.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8.
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibits II-3, II-8, and II-13.
(8) Source of personnel costs: Exhibits II-3, II-11, and II-13.
(9) Choice of cataloging method and source is left to the region; costs vary accordingly.
(10) Assumes that volunteer assistance continues.
(11) Source of data: Exhibit III-4.

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

Library or System: Lake Agassiz Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	3.50	2.20	1.88	2.64	0.05	10.27
Agencies	3.58	10.10	3.75	8.70	4.22	30.35
Total	7.08	12.30	5.63	11.34	4.27	40.62
Avg. Salary/Hour	$6.61(1)	$5.12	$3.71	$3.66	$5.25	-
Benefits as % of Salary	14.7%	14.7%	14.7%	14.7%	14.7%	-
Avg. Salary + Benefits/Hour	$7.58	$5.87	$4.26	$4.20	$6.02	-

(1) Excluding Director

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: Lake Agassiz Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	0.10	-	-	-	-	0.10
Catalog Maintenance	-	0.05	0.10	0.10	0.40	0.65
Locator File Maintenance	-	-	-	-	0.60	0.60
Shelf List Maintenance	-	0.05	-	0.05	-	0.10
On-Order File Maintenance	-	0.05	-	0.05	-	0.10
Total	0.10	0.15	0.10	0.20	1.00	1.55

CATALOG STUDY ADVISORY GROUP.

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: Lake Agassiz Regional Library

Vendor Name	Description of Supplies or Services	Amount
1. Demco/Gaylord/ Northern School	Supplies	$1,382
2. CCC	Catalog cards	2,028
3. Brodart/Josteńs Bound-To-Stay-Bound	Catalog cards	6,428
	Total	$9,838

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: Lake Agassiz Regional Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging			$9,838	$ 1,577	$11,415	
Catalog Maintenance - Union Catalog - Branch Catalogs				7,376	7,376	
Locator File Maintenance				7,513	7,513	
Shelf List Maintenance				1,047	1,047	
On-Order File Maintenance				1,047	1,047	
Total	-	-	$9,838	$18,560	$28,398	$1.54

Estimated Personnel Time and Cost for Each Alternative

Library or System: Lake Agassiz (Total)

	Est. Cost per FTE-HR	Present Method		Online System		Com Vendor		OCLC, Inc.		Mini-Marc	
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarian - MLS	7.58	-	-	-	-	-	-				
- BA/BS	5.87	.15	1,831	.05	610	.05	610				
Technical Assistant	4.26	.10	886	-	-	-	-				
Clerical	4.20	.20	1,747	.05	437	.05	437				
Other	6.02	1.00	12,522	-	-	.60	7,513				
Total		1.45	16,986	.10	1,047	.70	8,560				
Current Cataloguing											
Librarian - MLS		.10	1,577			-	-	-	-	-	-
- BA/BS		-	-			.07	855	.05	610	.05	610
Technical Assistant		-	-			-	-	-	-	-	-
Clerical		-	-			.21	1,834	.25	2,184	.13	1,136
Other		-	-			-	-	-	-	-	-
Total		.10	1,577			.28	2,689	.30	2,794	.18	1,746
Retrospective Conversion											
Librarian - MLS						-	-	-	-	-	-
- BA/BS						.50	6,105	.40	4,884	.40	4,883
Technical Assistant						1.50	13,291	1.70	15,063	1.40	12,405
Clerical						.60	5,242	.40	3,495	-	-
Other						-	-	-	-	-	-
Total						2.60	24,638	2.50	23,442	1.80	17,288

Comparison of Total Estimated Costs

Library or System: Lake Agassiz

		Alternatives							
	Present Method	Online Catalog(2)	COM Vendor (3)	OCLC and COM (4)	MINI MARC and COM (5)	MINI MARC (Retro Only) and COM (5)	Online Hdqtrs COM Branches (6)	Online Hdqtrs/ COM Branches and OCLC (7)	Online Hdqtrs/ COM Branches MIN MARC (8)
Catalog and File Maintenance									
Initial costs		$ 294,775	11,280	11,280	11,280	11,280	133,330	133,330	133,330
Five years of annual costs:									
- Non-personnel	$ 24,595	191,250	54,935	54,935	54,935	54,935	113,935	113,935	113,935
- Personnel(10)	84,930	5,235	42,800	42,800	42,800	42,800	5,235	5,235	5,235
Total	109,525	491,260	109,015	109,015	109,015	109,015	252,500	252,500	252,500
Current Cataloging									
Initial costs	-		7,350	3,948	45,050	7,350	7,350	3,948	7,350
Five years of annual costs:									
- Non-personnel	24,595		7,710	58,220	45,250	7,710	7,710	58,220	7,710
- Personnel(10)	7,885		13,445	13,970	8,730	13,445	13,445	13,970	13,445
Total	32,480	(9)	28,505	76,138	99,030	28,505	28,505	76,138	28,505
Retrospective Conversion									
Initial costs:									
- Non-personnel			26,200	17,433	23,700	23,700	26,200	17,433	23,700
- Personnel(10)			24,638	23,442	17,288	17,288	24,638	23,442	17,288
Total		(9)	50,838	40,875	40,988	40,988	50,838	40,875	40,988
Combined Net Cost (1)									
Initial costs:									
- Non-personnel	-		20,800	26,243	56,480	42,330	142,850	148,293	164,380
- Personnel(10)	-		24,738	23,442	17,288	17,288	24,738	23,442	17,288
Five years of annual costs:									
- Non-personnel	49,190		60,220	113,155	100,185	60,220	119,220	172,155	119,220
- Personnel(10)	92,815		56,245	56,770	51,530	56,245	18,680	19,205	18,680
Total Five Years	142,005	(9)	162,003	219,610	225,483	176,083	305,488	363,095	319,568
Average Per Year - Initial & Annual	28,401		32,400	43,922	45,097	35,217	61,090	72,619	63,914
Average Annual Costs	28,401		23,293	33,985	30,343	23,293	27,580	38,272	27,580
Initial Costs	-		45,538	49,685	73,768	59,618	167,588	171,735	181,668

Note:

(1) Consideration of discounts, operating efficiencies, processing steps avoided, and interfaces required makes Net Cost less than a simple total.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8.
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibits II-3, II-8, II-13.
(8) Source of data: Exhibit III-4.
(9) Choice of cataloging method and source is left to region; costs vary accordingly.
(10) Source of data: Exhibit III-4.

225

XI. VIKING LIBRARY SYSTEM

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this section we have included relevant background data, conclusions and recommendations for the Viking Library System. Our analysis of the alternatives is described in Sections I through IV.

BACKGROUND

Currently, Viking maintains separate card files for the catalog, shelf list, on-order and locator files. Technical processing services are provided centrally for smaller members. The three largest members perform their own cataloging and processing. The region does not have any machine-readable records for these files. The union catalog maintained at Headquarters does not include all locally owned titles from the members.

There is a need to improve the quality and accessibility of the catalog to all agencies and branches in the region. Creation and maintenance of the library card catalog and its related manual files, i.e. the shelf list, locator file and on-order file, is labor-intensive and expensive. We also found that cost pressures have resulted in the quality of the current card catalogs being compromised, reflecting inconsistent cataloging and a variety of catalog rules. There is a tendency for the quality of card catalogs to deteriorate over time, making it difficult for patrons to find what they want.

Viking is seeking a cost-effective alternative to support the following objectives:

- Multiple access points to a regional union catalog with location entries in records from all members and branches;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

New forms of the catalog, maintained through machine-readable catalog records, offer substantial service benefits and possible increases in efficiency, partly through improved quality and partly by providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A card catalog.
- A Computer Output Microform or COM catalog.
- An online catalog, supported by a computer and accessible through computer terminals.
- Some combination of the above.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) versus current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

CONCLUSIONS

As a result of this study we are recommending that the Viking Library System convert to catalogs in machine-readable form by methods that provide a reasonable trade-off of cost and quality. The result of this effort will be a higher quality union catalog accessible to all members.

Our cost analysis evaluated personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine-readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high, especially for cataloging. After the initial effort to convert the existing catalogs to machine-readable form, the personnel effort required to maintain the catalogs, and to use the catalogs, would be substantially reduced. The cost estimates and savings considered in this report only represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements or savings in using machine-readable catalogs.

Based upon our analysis we have reached the following conclusions for Viking:

Catalog Form -

In our opinion, the best alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large members, with COM catalogs in the other branch libraries or agencies. We recommend that Viking acquire an online catalog/locator system soon after developing a union COM catalog for the region.

Current Cataloging -

We recommend cataloging through COM Vendor for Viking.

The needs and priorities of the six regional library systems are best satisfied by current cataloging through OCLC, Inc. but with an online catalog/locator system installed locally, using OCLC's online cataloging service is redundant in some ways. We rate MINI MARC next in terms of benefits. Cataloging through a COM vendor is rated third in terms of benefits. We recommend it for Viking due to its lower cost. The region would also save money by processing materials centrally for the larger members.

Retrospective Conversion -

Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. For regions using OCLC for current cataloging, we recommend OCLC for retrospective conversion. If Viking uses a COM vendor for current cataloging, we recommend using MINI MARC for retrospective conversion.

RECOMMENDATIONS

Based upon our study, we conclude that the most attractive alternative for the Viking Library System is an online catalog/locator system for headquarters staff and the three largest members (Fergus Falls, Morris and Alexandria) with COM catalogs for public access in all member libraries. With some additional funding, the system could be expanded to support circulation control at the three large members, which would be very beneficial. We recommend that you perform a retrospective conversion using a MINI MARC system while maintaining catalog, shelf list, locator and on-order card files. Once the online and COM catalogs are established, perform current cataloging through the COM vendor operating as a processing center for the library system.

We also recommend that you continue to work with others in your Minnesota Multi Type Region and explore opportunities for cooperative efforts once your retrospective conversion is complete.

Retrospective conversion will take a year or longer. You do not need to purchase an online catalog/locator system until the conversion is nearly complete. During this time you will be able to plan for funding, selection and installation of the system.

Cost estimates for the alternatives are presented in the exhibit on page XI-34.

We estimate that Viking will need the following amounts to support the effort:

	Personnel	Non-Personnel	Total
First year costs of retrospective conversion	$19,000-$25,000	$17,000-$23,000	$36,000-$48,000
Second year initial costs for online catalog and COM catalog	-	$130,000-$135,000	$130,000-$135,000
Additional annual costs	Staff effort reduced by 2.1 to 2.4 FTEs	$15,000-$16,000	$4,000 Decrease to $4,000 Increase

REGIONAL CHARACTERISTICS

Headquarters: Viking Library System, Fergus Falls

Primary population served (1970 census):	93,206
Expenditures (FY 79):	
Materials	$131,484
Total operating	$548,589
Number of agencies:	
Branches	10
Bookmobiles	2
Materials (as of 12/31/79:	
Bookstock	183,522
Nonbook	6,370
Uncataloged	(1,499)
Cataloged	188,393

Comment:

- o VLS is the only Federated system among the six client systems. This means that the VLS libraries are almost totally autonomous from the central unit: they control their own funds and choose which services of those provided by VLS they wish to use. Consequently, three of the member libraries, Alexandria, Fergus Falls and Morris, have local technical processing. The statistical information concerning these three libraries is shown separately.

TECHNICAL SERVICES - VLS

Files - all maintained at HQ

Catalog:

- Divided card file
- Includes all VLS holdings
- Includes copy of multi-part order form in title order
- Does not display location data

Shelf List:

- Divided Card file
- Includes only holdings purchased for VLS collection
- Does not display location data

Location File:

- Separate by number
- Card file in title order
- Includes books ordered for members by VLS, but not books ordered by members for themselves

Indefinite Loan File:

- Shelf list cards in title order
- Includes books belonging to VLS which are on indefinite loan to members

Other Files:

- Paperback on-order file
- Paperback holdings file
- Rotating collections file
- Cassette locator file
- Cassette main entry catalog
- Cassette shelf list

Acquisitions Process

- HQ staff selects and orders titles for bookmobiles and rotating collection
- Members select for themselves
- Members can order for their own collections, or can order through HQ.
- In order to make use of certain funds, members must order through HQ.

Cataloging Process - see flowchart

- Whenever possible, books are ordered preprocessed.
- Estimate 76% preprocessed, 16% need to have cards ordered, and 8% require original cataloging.

TECHNICAL SERVICES - Member Libraries

Alexandria

- All selecting and ordering is done locally.
- No cataloging is commercially obtained. The librarian does original cataloging. Cards are typed individually.

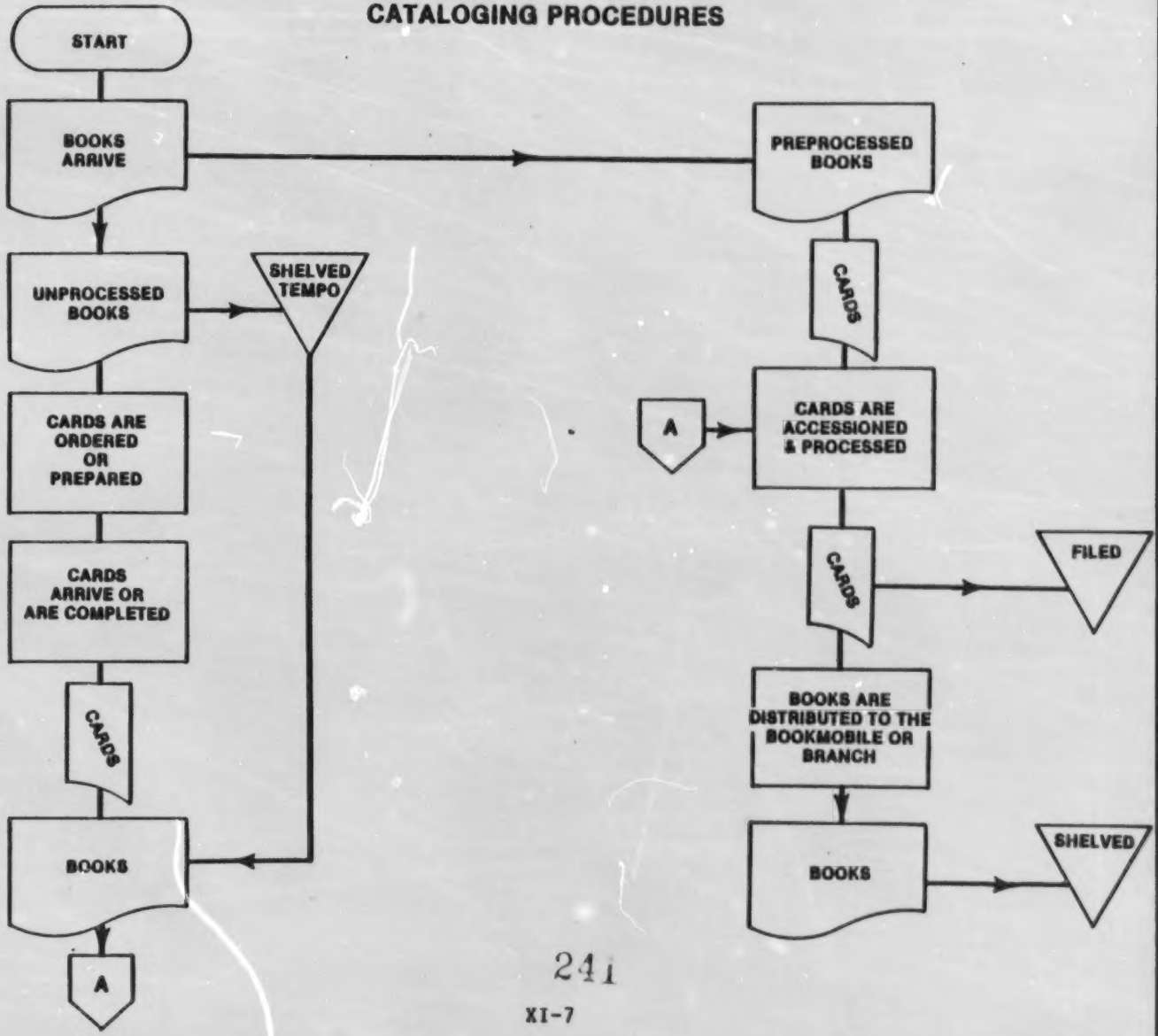
Fergus Falls

- Local staff does selecting and ordering
- Whenever possbile, items are purchased already cataloged. Estimated 80% of total purchases are precataloged.
- Remaining 20% are cataloged by local personnel.

Morris

- Selection and ordering are accomplished by local staff.
- Cataloging is largely original or copy by librarian.
- Only about 10% of all purchases are ordered precataloged.

CATALOG STUDY ADVISORY GROUP
VIKING LIBRARY SYSTEM
CATALOGING PROCEDURES



CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: Viking Library System - Headquarters

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
• Volumes (or Units)	13,762	N/A	99	601			14,363	99
• Titles	9,000	40	N/A	N/A			9,000	40
Added (during 1979)								
• Volumes (or Units	2,759	-	54	196			2,955	54
• Titles	2,100	-	54	-				
Current Record								
• Cataloged	Yes	No	No	Yes				
• Form								
- Card	Yes			Yes				
- Book or List								
Current Source(s)								
• Catalog Record Content								
- Jobber	92%			-				
- Original (your staff)	8%			100%				
- Other (please specify)								
• Catalog Cards								
- Jobber	92%			-				
- Your Staff	8%			100%				
- Other (please specify)								

CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: Viking Library System - 7 Small Members

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
• Volumes (or Units)	59,627	191	-	381	-	-	59,657	572
• Titles	N/A	N/A		N/A			N/A	N/A
Added (during 1979)								
• Volumes (or Units	4,186	-	-	27	-	-	4,186	27
• Titles	N/A			N/A			N/A	N/A
Current Record								
• Cataloged	Usually	No		Seldom				
• Form	Usually							
- Card								
- Book or List								
Current Source(s)								
• Catalog Record Content	Varies							
- Jobber								
- Original (your staff)								
- Other (please specify)								
• Catalog Cards	Varies							
- Jobber								
- Your Staff								
- Other (please specify)								

CATALOG STUDY ADVISORY GROUP

Catalogs

Library or System: Viking Library System - Headquarters and 7 Small Members

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	-	24	8	5	-	14,363	9,000	N/A	N/A
Branch/Member Catalogs	89	18	14	-	-	59,657	N/A	542	N/A
Totals	89	42	22	5	-	74,020	9,000	542	N/A

247

243

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

Library or System: Viking Library System - Headquarters and 7 Small Members

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	2.00	-	5.00	1.00	0.25	8.25
Agencies	-	0.50	3.40(1)	-	-	3.90
Total	2.00	0.50	8.40	1.00	0.25	12.15
Avg. Salary/Hour	$6.97(2)	$4.00	$4.57/3.35(3)	$4.87	$3.35	-
Benefits as % of Salary	15.1%	15.1%	15.1%	15.1%	15.1%	-
Avg. Salary + Benefits/Hour	$8.02	$4.60	$5.26/3.86	$5.61	$3.86	-

(1) 1.00 FTE is a CETA employee who earns minimum wage. The Library does not contribute to the employee's compensation.
(2) Excluding Director.
(3) All technical assistants in agencies receive minimum wage.

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: Viking Library System - Headquarters[1]

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	0.02	-	-	-	-	0.02
Catalog Maintenance) Locator File Maintenance) Shelf List Maintenance) On-Order File Maintenance)	0.08	-	0.20	-	-	0.28
Total	0.10	-	0.20	-	-	0.30

(1) Does not include the small amount of time spent in 7 Small Member Libraries.

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: Viking Library System - Headquarters(1)

Vendor Name	Description of Supplies or Services	Amount
1. CCC	Card sets	$ 385
2. Xerox	Card stock	100
3. Baker & Taylor	Processing	1,501
	Total	$1,986

(1) Does not include small amounts spent by 7 small member Libraries

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: Viking Library System - Headquarters

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$100	$1,886	$ 337	$2,323	
Catalog Maintenance - Union Catalog - Branch Catalogs				880	880	
Locator File Maintenance				880	880	
Shelf List Maintenance				880	880	
On-Order File Maintenance				880	880	
Total	-	$100	$1,886	$3,857	$5,843	$1.98

CATALOG STUDY ADVISORY GROUP

Catalog Records

VLS -
Library or System: Alexandria Public Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
• Volumes (or Units)	29,404	136	80	1,933	-	-	31,417	136
• Titles	N/A	136	80	N/A			N/A	136
Added (during 1979)								
• Volumes (or Units	2,099	N/A	9	347	-	-	2,455	N/A
• Titles	N/A	N/A	9	N/A			N/A	N/A
Current Record								
• Cataloged	Yes	No	Yes	Yes				
• Form	Yes		Yes	Yes				
- Card								
- Book or List								
Current Source(s)								
• Catalog Record Content								
- Jobber								
- Original (your staff)	100%		100%	100%				
- Other (please specify)								
• Catalog Cards								
- Jobber								
- Your Staff	100%		100%	100%				
- Other (please specify)								

CATALOG STUDY ADVISORY GROUP

Catalogs

VLS -
Library or System: Alexandria Public Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	92	-	28	-	1	31,417	N/A	-	150
Branch/Member Catalogs	-	-	-	-	-	-	-	-	-
Totals	92	-	28	-	1	31,417	N/A	-	150

255

256

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

VLS -
Library or System: Alexandria Public Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	-	1.00	2.00	1.50	-	4.50
Agencies	-	-	-	-	-	-
Total	-	1.00	2.00	1.50	-	4.50
Avg. Salary/Hour	-	$6.92	$3.91	$3.57	-	-
Benefits as % of Salary	-	15%	15%	15%	-	-
Avg. Salary + Benefits/Hour	-	$7.96	$4.50	$4.11	-	-

253

257

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

VLS -
Library or System: Alexandria Public Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	-	0.40	0.25	0.50	-	1.15
Catalog Maintenance	-	0.10	-	0.10	-	0.20
Locator File Maintenance	-	-	-	-	-	-
Shelf List Maintenance	-	0.05	-	-	-	0.05
On-Order File Maintenance	-	0.05	-	-	-	0.05
Total	-	0.60	0.25	0.60	-	1.45

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: VLS - Alexandria Public Library

Vendor Name	Description of Supplies or Services	Amount
1. Demco	Catalog cards	$110
2. Gaylord Bros.	Book cards	32
3. Demco	Order forms	97
	Total	$239

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: VLS - Alexandria Public Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$142		$13,237	$13,379	
Catalog Maintenance - Union Catalog - Branch Catalogs				2,511	2,511	
Locator File Maintenance						
Shelf List Maintenance				828	828	
On-Order File Maintenance		97		828	925	
Total	-	$239	-	$17,404	$17,643	$7.19

CATALOG STUDY ADVISORY GROUP

Catalog Records

VLS -
Library or System: Fergus Falls Public Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
• Volumes (or Units)	46,692	161	49	2,000	-	-	48,692	210
• Titles	N/A	159	49	2,000			N/A	208
Added (during 1979)								
• Volumes (or Units	3,207	-	14	400	-	-	3,607	14
• Titles	N/A	-	14	400			N/A	14
Current Record								
• Cataloged	Yes			Yes				
• Form								
- Card	Yes			Yes				
- Book or List								
Current Source(s)								
• Catalog Record Content								
- Jobber	80%							
- Original (your staff)	20%			100%				
- Other (please specify)								
• Catalog Cards								
- Jobber	80%							
- Your Staff	20%			100%				
- Other (please specify)								

CATALOG STUDY ADVISORY GROUP

Catalogs

VLS -
Library or System: Fergus Falls Public Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	126	-	40	-	2	46,692	N/A	N/A	N/A
Branch/Member Catalogs	-	-	-	-	-	-	-	-	-
Totals	126	-	40	-	1	46,692	N/A	N/A	N/A

264

265

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

VLS -
Library or System: Fergus Falls Public Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	2.10	0.50	1.00	1.25	1.00	5.85
Agencies	-	-	-	-	-	-
Total	2.10	0.50	1.00	1.25	1.00	5.85
Avg. Salary/Hour	$10.66	$6.19	$4.06	$4.00	$5.77	-
Benefits as % of Salary	15%	15%	15%	15%	15%	-
Avg. Salary + Benefits/Hour	$12.26	$7.12	$4.67	$4.60	$6.64	-

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: VLS - Fergus Falls Public Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	-	0.10	-	-	-	0.10
Catalog Maintenance	-	-	0.10	0.05	-	0.15
Locator File Maintenance	-	-	-	-	-	-
Shelf List Maintenance	-	-	-	0.05	-	0.05
On-Order File Maintenance	-	-	0.05	-	-	0.05
Total	-	0.10	0.15	0.10	-	0.35

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files
VLS -
Library or System: Fergus Falls Public Library

Vendor Name	Description of Supplies or Services	Amount
1. Catalog Card Corp.	Catalog cards	$600
2. Assorted vendors	Card kits	285
	Total	$885

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: VLS - Fergus Falls Public Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$885		$1,481	$2,366	
Catalog Maintenance - Union Catalog - Branch Catalogs				1,449	1,449	
Locator File Maintenance						
Shelf List Maintenance				478	478	
On-Order File Maintenance				486	486	
Total	-	$885	-	$3,894	$4,779	$1.33

CATALOG STUDY ADVISORY GROUP

Catalog Records

VLS -

Library or System: Morris Public Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
• Volumes (or Units)	34,0[illegible]	82	-	657	-	-	34,294	482
• Titles	N/A	82		N/A			N/A	N/A
Added (during 1979)								
• Volumes (or Units	2,775	-	-	57	-	-	2,832	-
• Titles	N/A			N/A			N/A	-
Current Record								
• Cataloged	Yes	No	-	Partial	-	-		
• Form								
- Card	Yes			Yes				
- Book or List								
Current Source(s)								
• Catalog Record Content								
- Jobber	10%							
- Original (your staff)	90%			100%				
- Other (please specify)								
• Catalog Cards								
- Jobber	10%							
- Your Staff	90%			100%				
- Other (please specify)								

271

272

CATALOG STUDY ADVISORY GROUP

Catalogs

VLS -
Library or System: Morris Public Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	-	90	24	-	-	34,294	N/A	-	-
Branch/Member Catalogs	-	-	-	-	-	-	-	-	-
Totals	-	90	24	-	-	34,294	N/A	-	-

273

274

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

VLS -
Library or System: Morris Public Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	1.00	-	1.50	-	1.50	4.00
Agencies	-	-	-	-	-	-
Total	1.00	-	1.50	-	1.50	4.00
Avg. Salary/Hour	$6.92	-	$3.80	-	$0.76(1)	-
Benefits as % of Salary	15%	-	15%	-	-	-
Avg. Salary + Benefits/Hour	$7.96	-	$4.37	-	$0.76(1)	-

(1) "Other" personnel are work-study employees who earn $3.00/hour. The Library pays only 20% or $0.76, of the hourly wage.

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

VLS -
Library or System: Morris Public Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	0.15	-	-	-	-	0.15
Catalog Maintenance	-	-	0.375	-	-	0.375
Locator File Maintenance	-	-	-	-	-	-
Shelf List Maintenance	-	-	0.125	-	-	0.125
On-Order File Maintenance	-	-	-	-	-	-
Total	0.15	-	0.50	-	-	0.65

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: VLS - Morris Public Library

Vendor Name	Description of Supplies or Services	Amount
1. Baker & Taylor	Processing	$300
2. Demco	Supplies	400
	Total	$700

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary
VLS -
Library or System: Morris Public Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$700		$2,484	$3,184	
Catalog Maintenance - Union Catalog - Branch Catalogs				3,409	3,409	
Locator File Maintenance						
Shelf List Maintenance				1,136	1,136	
On-Order File Maintenance						
Total	-	$700	-	$7,029	$7,729	$2.73

Estimated Personnel Time and Cost for Each Alternative

Library or System: Viking (Total)

	Ave. Cost per FTE-HR	Present Method		Online System		Com Vendor		OCLC, Inc		Mini-Marc	
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarian - MLS	9.00	.08	1,498	.02	375	.04	749				
- BA/BS	6.50	.20	2,704	.05	676	.05	676				
Technical Assistant	4.70	.85	8,309	.10	977	.15	1,467				
Clerical	4.70	.20	1,955	-	-	-	-				
Other	3.75	-	-	-	-	-	-				
Total		1.33	14,466	.17	2,028	.24	2,892				
Current Cataloging											
Librarian - MLS		.17	3,183			-	-	-	-	-	-
- BA/BS		.50	6,760			.07	946	.06	811	.06	811
Technical Assistant		.25	2,444			.-	-	-	-	-	-
Clerical		.50	4,888			.22	2,150	.25	2,444	.13	1,271
Other		-	-			-	-	-	-	-	-
Total		1.42	17,275			.29	3,096	.31	3,255	.19	2,082
Retrospective Conversion											
Librarian - MLS						-	-	-	-	-	-
- BA/BS						.50	6,760	.40	5,408	.40	5,408
Technical Assistant						1.50	14,664	1.70	16,620	1.40	13,686
Clerical						.60	5,866	.40	3,910	-	-
Other						-	-	-	-	-	-
Total						2.60	27,290	2.50	25,938	1.80	19,094

Comparison of Total Estimated Costs

Library or System: Viking (Total)

	Initial Costs								
	Present Method	Online Catalog(2)	COM Vendor(3)	OCLC and COM(4)	MINI MARC and COM(5)	MINI MARC (Retro only) and COM(5)	Online Hdqtr COM Branches(6)	Online Hdqtrs COM Branches and OCLC(7)	Online Hdqtrs COM Branches MINI MARC(8)
Catalog and File Maintenance									
Initial costs		$ 288,600	9,250	9,250	9,250	9,250	130,295	130,295	130,295
Five years of annual costs:									
- Non-personnel	$ 485	187,350	51,575	51,575	51,575	51,575	124,275	124,275	124,275
- Personnel(10)	72,730	10,140	14,460	14,460	14,460	14,460	10,140	10,140	10,140
Total	73,215	486,090	75,285	75,285	75,285	72,285	264,170	264,170	264,170
Current Cataloging									
Initial costs			7,350	3,948	45,050	7,350	7,350	3,948	7,350
Five years of annual costs:									
- Non-personnel	18,565		7,700	58,130	45,250	7,700	7,700	58,130	7,700
- Personnel(10)	86,375		15,480	16,275	10,410	15,480	15,480	16,275	15,480
Total	104,940	(9)	30,530	78,353	100,710	30,530	30,530	78,353	30,530
Retrospective Conversion									
Initial costs:									
- Non-personnel			26,200	17,433	23,700	23,700	26,200	17,433	23,700
- Personnel(10)			27,290	25,938	19,094	19,094	27,290	25,938	19,094
Total		(9)	53,490	43,371	42,794	42,794	53,490	43,371	42,794
Combined Net Cost(1)									
Initial costs:									
- Non-personnel	-		18,800	24,223	54,350	40,300	139,845	145,268	161,345
- Personnel(10)	-		27,290	25,938	19,094	19,094	27,290	25,938	19,094
Five years of annual costs:									
- Non-personnel	19,050		55,775	109,705	96,825	56,775	129,550	182,405	129,550
- Personnel(10)	159,105		29,940	30,735	24,870	29,940	25,620	26,415	25,620
Total Five Years	178,155	(9)	132,805	190,601	195,139	146,109	332,305	380,026	335,609
Average Per Year -									
Initial & Annual	35,631		26,561	38,120	38,028	29,222	64,461	76,005	67,122
Average Annual Costs	35,631		17,371	28,088	24,339	17,371	31,034	41,764	31,034
Initial Costs	-		46,090	50,161	73,444	59,394	167,135	171,206	180,439

Note:

(1) Consideration of discounts, operating efficiencies processing steps required or avoided makes Net Cost less than a simple total.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8.
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibits II-3, II-8 and II-13.
(8) Source of data: Exhibit II-3, II-11 and II-13.
(9) Choice of cataloging method and source is left to the region; costs vary accordingly.
(10) Source of data: Exhibit III-4.

XII. SIX REGION COOPERATIVE

Estimated Personnel Time and Cost for Each Alternative

Library or System: Six Region Cooperative Action

	Ave. Cost per FTE-HR	Online System		Com Vendor		OCLC, Inc.		Mini-Marc		Online Com. Cut.	Hdqtrs. Cut.
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarians - MLS	7.50	.07	1,092	.19	2,964					.07	1,092
- BA/BS	6.00	.15	1,872	.15	1,872					.15	1,872
Technical Assistant	4.75	.25	2,470	.30	2,964					.25	2,470
Clerical	4.00	.45	3,744	1.38	11,481					.45	3,744
Other	4.75	.28	2,766	.88	8,694					.28	2,766
Total		1.20	11,944	2.90	27,975	N/A		N/A		1.20	11,944
Current Cataloging											
Librarians - MLS				-	-	-	-	-	-	-	-
- BA/BS				.28	3,494	.18	2,246	.15	2,246	.28	3,494
Technical Assistant				-	-	-	-	-	-	-	-
Clerical				.88	7,322	.75	6,240	.38	3,161	.88	7,322
Other				-	-	-	-	-	-	-	-
Total		N/A		1.16	10,816	.93	8,486	.56	5,407	1.16	10,816
Retrospective Conversion(1)											
Librarians - MLS				-	-	-	-	-	-	-	-
- BA/BS				3.2	39,936	1.6	19,968	2.7	33,696	3.2	39,936
Technical Assistant				8.3	82,004	7.8	77,064	6.3	62,244	8.3	82,004
Clerical				4.2	34,944	1.9	15,808			4.2	34,944
Other				-	-	-	-	-	-	-	-
Total		N/A		15.7	156,884	11.3	112,840	8.0	95,940	15.7	156,884

Note:

(1) Does not include weeding or a physical inventory

Comparison of Total Estimated Costs

Six Region Cooperative Action

		Initial Costs						
	Present Method	Online Catalog(2)	COM Vendor(3)	OCLC and COM(4)	MINI MARC and COM(5)	MINI MARC (Retro only) and COM(5)	Online Hdqtr COM Branches(6)	Online Hdqtrs COM Branches and OCLC(7)	Online Hdqtrs COM Branches MINI MARC(8)
Catalog and File Maintenance									
Initial costs		$ 748,000	38,445	38,445	38,445	38,445	452,345	[illegible]	452,345
Five years of annual costs:									
- Non-personnel	$ 34,975	782,250	226,305	226,305	226,305	226,305	532,205	532,205	532,205
- Personnel(10)	387,585	45,900	139,875	139,875	139,875	139,875	45,890	45,890	45,890
Total	422,560	1,576,140	404,625	404,625	404,625	404,625	1,030,440	1,030,440	1,030,440
Current Cataloging									
Initial costs			14,100	7,748	45,100	14,100	14,100	7,748	14,100
Five years of annual costs:									
- Non-personnel	81,805		16,515	114,715	45,500	16,515	16,515	114,715	16,515
- Personnel(10)	269,885		54,080	42,430	27,035	54,080	54,080	42,430	54,080
Total	351,690	(9)	84,695	164,893	117,635	84,695	84,695	164,893	84,695
Retrospective Conversion									
Initial costs:									
- Non-personnel			69,974	51,598	87,400	87,400	69,974	51,598	87,400
- Personnel(10)			156,884	112,840	95,940	95,940	156,884	112,840	95,940
Total		(9)	226,858	164,438	183,340	183,340	226,858	164,438	183,340
Combined Net Cost(1)									
Initial costs:									
- Non-personnel			58,950	91,083	147,345	133,593	472,850	504,983	553,845
- Personnel(10)			156,884	112,840	95,940	95,940	156,884	112,840	95,940
Five years of annual costs:									
- Non-personnel	116,780		256,315	341,020	271,805	256,315	562,215	646,920	562,215
- Personnel(10)	657,740		193,955	182,305	166,910	193,955	101,770	88,320	101,770
Total Five Years	774,250	(9)	666,104	724,248	682,000	679,803	1,293,719	1,353,063	1,313,770
Average Per Year Per Region	25,808		22,203	24,141	22,733	22,660	43,124	45,102	43,792
Average Annual Cost Per Region	25,808		15,009	17,444	14,624	15,009	22,132	24,508	22,132
Average Initial Cost Per Region	-		43,167	33,987	40,547	38,256	104,955	103,137	108,298

Note:

(1) Includes consideration of discounts, operating efficiencies, processing steps required or avoided.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8.
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibits II-3, II-8 and II-13.
(8) Source of data: Exhibit II-3, II-11 and II-13.
(9) Choice of Cataloging method and source is left to the region; costs vary accordingly.
(10) Source Data: Exhibit III-4.

APPENDIX A

Request for Bids for a COM Microfiche Catalog

SIX MINNESOTA
REGIONAL LIBRARY SYSTEMS

Specifications and Requests for Bids
for
COM Catalog Equipment and Services

TABLE OF CONTENTS

		Page
1.	INTRODUCTION	
1.1	Background	1
1.2	Scope of Contract	1
1.3	Importance of Specifications	2
1.4	Conversion	3
1.5	Ongoing Input	3
2.	CONTRACTUAL INFORMATION	
2.1	Bid Submission	4
2.2	Calendar of Events	4
2.3	Bid Evaluation and Contract Award	4
2.4	Contract Period	5
2.5	Penalties	6
2.6	Cancellation of Contract	7
2.7	Ownership of Data Base	7
2.8	Damage or Loss of Data	8
2.9	Contractor's Cost	8
2.10	News Releases	8
2.11	Other Contract Conditions	8
3.	INPUT SPECIFICATIONS	
3.1	Types of Input	11
3.2	Proposed Input Flow for Ongoing Maintenance	11
3.3	Training and Support	12

TABLE OF CONTENTS, Continued

		Page
4.	OUTPUT SPECIFICATIONS	
4.1	Public Catalogs	13
4.2	Official File on Microfiche	14
4.3	Input Edit List	14
4.4	List of No Matches	14
4.5	Transaction Report/Edit List	14
4.6	Input Error List	14
4.7	Authority Edit Lists	15
4.8	Optional Publications	15
4.9	Machine Readable Data Base	15
4.10	Statistical Analysis Capability	15
5.	DATA BASE MAINTENANCE SPECIFICATIONS	
5.1	Architecture and Content	17
5.2	Contractor Capabilities	17
5.3	Authority Control	17
5.4	Quality Control	18
5.5	Character Set	19
5.6	Filing Rules	19
6.	BIDDER PROPOSAL FORM	20

Request for Bids
for a
COM Microfiche Catalog

Issued by:

Six Minnesota

Regional Library Systems

Date:

1. INTRODUCTION

1.1 Background

Six Minnesota Regional Library Systems (RLS) - Crow River Regional Library, East Central Regional Library, Kitchigami Regional Library, Lake Agassiz Regional Library, Northwest Regional Library, and the Viking Library System - have joined together to solicit bids on the provision of COM catalog services to each Regional Library System. The six RLS's will jointly choose a common vendor but the vendor will be expected to sign a separate contract with each RLS. This document sets forth the needs for the Library and the terms for submission of bids.

Collection characteristics for each RLS are presented in Exhibit A. A retrospective conversion project will commence once the vendor has been selected. Currently, each RLS has no records in machine readable form.

EXHIBIT A

Name	# Titles	# Volume	Adding annually: # Titles	Adding annually: # Volumes	COM Catalog: Copies	COM Catalog: Multi-region union catalog
Crow River	106,991	185,000	4,563	7,867	20	No
East Central	80,000	104,000	3,101	6,144	20	No
Kitchigami	50,000	78,000	3,514	5,504	12	Yes
Northwest	60,000	100,000	1,424	2,375	12	Yes
Viking	75,000	188,000	6,206	16,035	20	Yes
Lake Agassiz	75,000	223,000	6,218	18,468	30	Yes
Multi-Region Union Catalog	150,000	-	8,800	-	75	

The RLS's use the current edition of the Dewey classification system, the Cutter Three-Figure Author Table, and the current edition of the Library of Congress subject headings. A computer maintained microimage catalog will lead to a complete updating of subject headings, including all necessary cross-references, and complete name and subject heading authority control.

1.2 Scope of Contract

It is the intent of the six RLS's to contract for the creation and management of a separate comprehensive machine-readable data base for each RLS. Initially, this data base will represent each RLS's print material. Additions of other media (pamphlet file, sound recordings, video tapes/cassettes, kits, films, and art prints) to the data base will depend on cost and service potential.

The RLS's invite bids for the following products and services:

(1) The conversion of each of the RLS's shelf list into a complete machine-readable bibliographic data base in MARC II format for each Regional Library System.

(2) The provision of microfiche catalogs from the RLS's machine-readable bibliographic data base.

(3) The support of the catalog maintenance operations, including the provision of specified publications.

(4) The provision of related catalog products which may be required by the RLS during the term of the contract.

Because of the specialized technical nature of computerized bibliographic processing and the complexity of the products desired, the RLS's will contract with a single, qualified contractor to supply all equipment and to perform all data conversion, computer processing, reproduction, packaging and delivery necessary to provide those services and to product those products required by the RLS's.

This solicitation will select a vendor for all six Regional Library Systems although the vendor will be expected to sign an individual contract with each Regional Library System.

1.3 Importance of Specifications

The service and performance requirements described in the specifications are essential conditions of this contract and are as vital as the prices bid. The purpose of these requirements, requested samples, and specified procedures is to determine that the bidder possesses the experience, staff, software, hardware and resources to provide the services and the products required within an acceptable period of time. Bids are thus solicited only from vendors demonstrating the specific capabilities, experience, financial resources, existing staff and physical facilities necessary to comply with the requirements specified herein.

1.4 Conversion

Each RLS will enter search records using its shelf list using a microcomputer to store search arguments on floppy diskettes. These machine-readable search records will be in a format specified by the selected vendor. The diskettes containing the search records will be sent to the vendor on a regular basis to verify the accurate reading of the search records. These search records will be used for searching full bibliographic record data bases (LC MARC and other available data bases as selected by the RLS) and adding the local call number and appropriate holding symbols.

1.5 Ongoing Input

Simultaneously with the conversion project, each RLS will initiate procedures for inputting records for new acquisitions into the data base. The contractor will receive search records (author, title, publication date, LC card number) and full records in machine-readable form on magnetic diskette ready to be converted to machine readable form. The machine-readable search records will be in a format specified by the selected vendor. Full records supplied in machine-readable form will be MARC II format in both architecture and content. The contractor will supply instructions and materials for all of the above procedures.

297

293

2. CONTRACTUAL INFORMATION

2.1 Bid Submission

Bids will be submitted on the enclosed Bidder Proposal form. The purpose of the Bidder Proposal Form is to permit evaluation of all bids in a complete and consistent fashion. Qualifications of each bidder to perform the services required by a contract resulting from this bid call will be judged according to the responses to questions posed and from samples submitted. After preliminary evaluation of the bids received, the Library may request the highest ranked bidderes to appear for oral interviews.

Technical questions relating to these specifications must received by the Library in writing no less than twenty-one (21) days prior to deadline for receipt of bids. Questions from bidders will not be answered verbally. All questions are to be addressed to:

Written questions will be answered in writing and copies of both questions and answers will be forwarded to all bidders.

2.2 Calendar of Events

Event	Date
Release of Invitation to Bid	date
Last Day for Written Inquiries	date + 5 weeks
Bid Opening	date + 8 weeks
Award of Contract	date + 15 weeks

2.3 Bid Evaluation and Contract Award

The six Minnesota Regional Library Systems reserve the right to accept or reject any or all bids, if, in its opinion, such action would be in the best interest of the Library.

Evaluation of bids will be made from the Bidder Proposal Form and will be based upon both quantitative and qualitative factors. The quantitative factor will be determined by comparing the prices of each bidder for the entire project based on the extension of the unit prices quoted for each task and product by the respective estimated quantities, resulting in a comparison of a total price. Qualitative evaluation will be based on bidders' responses to the questions posed on the Proposal Form and on the required samples.

Specifically, bids will be evaluated by the Library and the contract awarded by the Regional Library Systems on the basis of the following:

(1) Demonstrated Capability to Fulfill Bid Requirements:

a. Availability of Major Library Data Bases:
   1. LC MARC
   2. Others, particularly major public library data bases
   3. Others, particularly major public library data bases from the State of Minnesota

b. Contractor's System Capabilities:
   1. Bibliographic searching and processing
   2. Name and subject heading authority control
   3. Quality control
   4. Formatting of outputs
   5. Character sets available and physical characteristics of the catalog

c. Automated Catalog Business History
   1. Number of customers
   2. Number and size of automated catalog contracts

(2) Corporate Resources

a. Balance sheet and profit/loss statement
b. Staff assigned to project
c. Systems and programming staff
d. Computer hardware
e. Subcontractual services/equipment

(3) Ability to Fulfill Bid Specifications

a. Services offered
   1. In actual use
   2. Projected

(3) Ability to Fulfill Bid Specifications

a. Services offered
   1. In actual use
   2. Projected
b. Available options
c. Project training and support
d. Production schedules (turn around time)
e. Prices and costs
f. Ability to meet commitments

(4) Samples of Outputs Supplied

Bidder is required to submit samples (3 copies) of all outputs.

(5) Oral Interview

After preliminary evaluation of the bids received, the Library may request the highest ranked bidders to appear for oral interviews.

2.4 Contract Period

It is anticipated that this contract will be for two years from date of award.

This contract shall be renewable annually for additional periods of one year for the continuing production and maintenance of the microform catalogs at the option of the Regional Library Systems (RLS). Notice of intention to renew shall be provided to the contractor by each RLS no later than ninety (90) days prior to the termination of the previous contract. Notification by the contractor to the RLS of its agreement or disagreement to extend shall be made in writing within thirty (30) days of receipt of the RLS's written request.

2.5 Penalties

The following penalty shall apply if the terms set forth in the specification are not met, unless circumstances were beyond the control of the vendor.

(1) A penalty of 15% of the invoice total will be deducted for each week of delay in the delivery of the microfiche catalog, after a two-week grace period has elapsed.

2.6 Cancellation of Contract

The Library Director, or designate, shall assess any performance failures as they occur. In the event of a material breach of this contract by contractor and if, following thirty (30) days written notice thereof, contractor has not remedied said breach, the RLS, upon written notice to the contractor, shall be authorized to terminate this contract, thereafter reserving the right to proceed against the contractor for any and all damages arising from said breach as permitted by law.

Acceptable reasons for termination include, but are not limited to, the following:

(1) When the contractor is over thirty (30) days past due more than once in the delivery of a catalog supplement.

(2) When additions to or deletions from the Library's data base and/or changes to individual records have not been made by the contractor within thirty (30) days of receipt.

(3) When the contractor's name and subject heading authority control does not meet the specifications as stated in Section 5.3.

(4) When the contractor's microform catalog quality is unsatisfactory (e.g., cloudy film, insufficient density, incorrect display format, etc.).

(5) When more than 2% of the published bibliographic reference or index entries are in error due to contractor processing.

(6) When monthly billing is consistently tardy and/or incorrect.

2.7 Ownership of Data Base

The data base created on behalf of each Regional Library System will be the sole property of each RLS. Any use of this data base, including copies, or any parts thereof for commercial purposes without prior approval of the RLS is prohibited.

2.8 Damage or Loss of Data

The contractor will provide safeguards to ensure that no part of the RLS's data is lost or damaged. The contractor shall maintain sufficient copies of the RLS's archival tape on a separate premise from the operating data base to ensure that the RLS's data base is secure from loss due to disaster. Should damage or loss occur, the contractor will pay all costs for correction and/or replacement of data.

2.9 Contractor's Costs

Costs for developing a bid proposal and costs related to oral interviews are entirely the responsibility of the bidder and shall not be chargeable in any manner to the RL Systems.

2.10 News Releases

News Releases will not be made without prior approval of the RLS's.

2.11 Other Contract Conditions

(1) Compensation and Method of Payment

For his services under the terms of this Contract, the RLS shall pay the contractor the amount stated by the contractor in his proposal (Section 7.8).

The RLS reserves the right to reduce invoice amounts and/or withhold payment for major breaches of contract of which the following are examples:

(a) For each day that the contractor is thirty (30) days past due in the delivery of a catalog or catalog supplement the invoice amount will be reduced by $250.

(b) For each day that corrections and/or additions to the Library's data base have not been made by the contractor within twenty-one (21) days of the contractor, the invoice will be reduced by $100.

(c) Unsatisfactory microform quality (e.g., cloudy film, insufficient density, incorrect display format, etc.) will result in withholding of payment until satisfactory copies are delivered by the contractor.

(2) Term

This contract shall commence on its effective date first written above, and shall teerminate on (two years later) unless sooner terminated as provided herein. The RLS may, at its option, renew this contract for periods of one (1) year each, by giving the contractor written notice of the RLS's intent to do so not less than ninety (90) days prior to the erpiration of this contract; provided that the total life of this contract shall not exceed six (6) years except by written amendment.

(3) Laws and Ordinances

The contractor shall procure all permits and licenses, pay all charges and fees necessary and incidential to the lawful conduct of the services. He shall keep himself fully informed of all existing and future, federal, state and local laws, ordinances and regulations which in any manner affect the fulfillment of the contract and comply with same.

(4) Assignment

The contractor shall not assign any rights acquired hereby not hypothecate or mortgage this contract without first obtaining the written consent of the RLS, which may be withheld for good cause stated.

(5) Breach of Agreements

If at any time, in the opinion of the RLS, within policies established by the RLS, the contractor has failed to render services of proper quality or has failed to perform, keep and observe any of the terms, convenants or conditions herein contained on the part of the contractor to be performed, kept and observed, the RLS may give the contractor written notice to correct such conditions or cure such default and if any such condition or default shall continue for ten (10) days after said written notice, then and in that event, the contract shall cease and expire. Thereupon, the RLS or its duly authorized representative may employ other parties to carry the contract to completion in such manner as the RLS may deem proper. Any excess costs arising therefrom will be charged against the contractor. In the event of such termination, all money due the contractor or retained under the terms of the contract shall be forfeited to the RLS, and such forfeiture will not release

the contract. The contractor shall be credited with the amount of money so forfeited toward any excess costs arising from the termination of the contract and the completion of it by the RLS as above provided.

(6) Nonwaiver Provisions

No waiver of default by the RLS of any of the terms, covenants or conditions hereof to be performed, kept or observed by the contractor shall be construed to be or act as a waiver of any subsequent default of any of the terms, convenants and conditions herein contained.

(7) Nondiscrimination Provisions

The contractor promises to abide by the State of Minnesota affirmative action laws.

3. INPUT SPECIFICATIONS

3.1 Types of Input

(1) Full and search records will be submitted to the contractor by the Library in one or more of the following formats:

a. Machine-readable diskettes for retrospective conversion (search records).

b. Machine-readable diskettes for ongoing input (search records).

c. Machine-readable diskettes in MARC II format (full records).

(2) The RLS's will contract to have software developed to allow their ILL communication microcomputers to enter and store search records (arguments) according to specifications supplied by the vendor of choice. The ILL microcomputer is supplied by Tele-Terminals, Inc. of Brooklyn Park, MN 55428.

(3) It is the responsibility of the contractor to search LC MARC and other data bases to select full bibliographic records in MARC II format (both current and retrospective) from the search arguments supplied by the RLS.

3.2 Proposed Input Flow for Ongoing Maintenance

The Library will input data in the following general sequence:

(1) At the time of cataloging, the Library will submit search records (brief author, title, publication date, LC card number). These search records will be used by the contractor to search LC MARC and other data bases to select full bibliographic records. The Library may enter additional bibliographic data elements or update elements previously entered (i.e., local call number, etc.)

(2) The Library may elect to provide full records from another source (i.e., OCLC).

(3) Any data element in any record may be added or updated at any time as necessary.

3.3 Training and Support

(1) The contractor will supply necessary specifications and manuals describing the full input edit procedures and tagging conventions and authority control procedures without additional cost to the RLS. The contractor will provide the necessary training of Library personnel for the input procedures.

(2) The contractor will support telephone contact whenever required and will arrange for meetings of contractor representative(s) with the RLS on a mutually acceptable schedule.

4. OUTPUT SPECIFICATIONS

The six Minnesota RLS automated catalog data bases developed from the inputs specified in Section 3 (Input Specifications) and the requirements of Section 5 (Data Base Maintenance Specifications) is to be used to produce the following at the option of the RLS:

4.1 Public Catalogs

(1) Catalog on microfiche. A complete catalog of all titles held by the RLS intended to be displayed on microfiche at a reduction of 42x or 48x. The RLS reserves the option to include on order and/or in process titles in this catalog. The catalog will be fully cumulated at specified intervals (normally 2 times a year). Each new cumulated edition of the catalog will require 30 copies, estimated quantity).

The catalog will be a dictionary catalog with an arrangement of authors, titles, subjects and cross reference headings in one alphabet from A through Z. However, the RLS reserves the option to experiment with varying catalog formats in future cumulations, and contractor must have the capability to provide such variant formats, including a divided catalog (author, title and subject), when given sufficient lead time. The contractor must specify any costs for changing catalog formats.

The following may be included in each type of entry:

a. Title entry: Full title, author, year or publication and/or copyright, number of pages, added entry and subject tracings, call number, and record identification number (a unique number for each title used to access the machine-readable bibliographic records). Additional information such as publisher, illustrator for juvenile titles, and notes may be included at the option of the RLS.

b. Other entries: Degree of fullness of type of entry to be determined by the RLS. The RLS reserves the right to experiment with inclusion of varying data elements in future cumulations.

Each fiche will show an eye-readable header indicating the beginning record.

Submission of sample microfiche meeting these specifications is required. The contractor must be able to change page and entry format at any time upon request of the Library. Contractor must indicate any charges for such change.

4.2 Official File on Microfiche

A complete list of titles held by the RLS on microfiche at a reduction of 48x, fully cumulated at specified intervals, arranged by record identification number (1 copy, estimated quantity). This list will display the call number, record identification number, and all elements of descriptive cataloging including tags and subfield indicators.

4.3 Input Edit List

A bi-weekly printed proof list of matches from MARC or other available records. This proof list will contain complete records in MARC II format including tags and subfield indicators.

4.4 List of No Matches

Bi-weekly, or less frequently at the option of the RLS, a printed list of search arguments not matched after searching for ninety (90) days.

4.5 Transaction Report/Edit List

A bi-weekly printed list, showing all records input and all records modified since the last printing of this report. The RLS must be able to edit specific fields and subfields on this list without re-entering the entire record and without additional cost.

4.6 Input Error List

A bi-weekly, or less frequently at the option of the RLS, printed list, identifying by code any error or problem preventing establishment, deletion, or updating of a record resulting from input.

4.7 Authority Edit Lists

(1) With each cumulation of the catalog, a printed list of all new headings (subject, name and series) entering the data base. This list will be used for verification and establishment of local cross-references.

(2) Every 4 months, or less frequently at the option of the Library, a fully cumulated printed list of all name headings, subject terms, and traced series in the data base. This list is to be used to edit authorities, make local cross references, and enter "blanket" changes.

4.8 Optional Publications

The RLS may from time to time require other catalogs derived from its data base, based on such codes as subject entry, classification, language, intellectual level, media designator, processing status cost and the like.

4.9 Machine Readable Data Base

At every recumulation, the RLS may require a copy of its data base in MARC II machine-readable form as its own archival file. This shall be on 1600 or 800/bpi, 9-track magnetic tape. File marks and labels shall be decided upon at time of contract negotiations.

4.10 Statistical Analysis capability

The following statistical analysis capability may be required with each cumulation of the catalog:

a. Number of titles added and deleted

b. Number of titles added in each of the ten main Dewey classes

c. Total number of titles in data base

Each of these figures to be broken out by adult, juvenile and non-book materials.

All copies of all publications will be delivered to each RLS headquarters.

Each copy of the cataog will be packaged separately and will be clearly marked on the packaged as to issue, number, and date.

5. DATA BASE MAINTENANCE SPECIFICATIONS

The contractor will be responsible for the development and maintenance of the six Minnesota RLS's machine-readable base. The contractor will specify all programming languages and operating systems to be employed.

5.1 Architecture and Content

It is required that copies of each RLS's data base be deliverable in full LC MARC II communications format.

5.2 Contractor Capabilities

The contractor must be able to search the LC MARC data base (and others, as agreed upon) from search records supplied by the RLS and copy matched records into the RLS's data base.

The contractor must be able to store new title search records and pass them against incoming MARC records weekly for a period of 90 days. Failing to locate a full bibliographic record after 90 days, the contractor will automatically notify the RLS (see 4.6).

All bibliographic records will be referenced by a unique record identification number which can be checked for accuracy by an algorithm or an equivalent form of number validation (i.e., check digit). The bidder will specify the method of number validation.

5.3 Authority Control

The contractor's capability in providing automated authority control is to be described as requested on the Bidder Proposal Form. Minimum capabilities required by the RLS are as follows:

(1) Contractor must be able to produce sorted listings of all authors, subjects, traced series and cross references used in the RLS's file, suppressing duplicates [see 4.9 (2)].

(2) Contractor must have "blanket" change capability allowing the RLS to modify or delete headings (subject, name, and series) through a single instruction.

(3) Contractor will maintain a file of all headings (subject, name, and series) used by the RLS, both local and LC MARC, and check all headings entering the data base against that file. All new headings will be included in an edit list for verification and establishment of local cross-references [see 4.9 (1)].

(4) An automatic system for de-blinding cross-references (subject, name and series) must be part of the contractor's capability to avoid "blind" cross references in all outputs.

(5) The contractor will maintain and support the current edition of the Library of Congress Subject Heading List and all of its supplements in machine readable form.

(6) The contractor will check all subject headings against the latest LCSH authority file and modify them as necessary.

(7) The contractor will run each new LCSH supplement against the RLS's data base or subject authority file so that headings can be continually updated and the RLS notified of those headings so changed as well as headings not in conformance with the current edition of LCSH.

(8) The contractor will check headings against the RLS's subject authority file (current edition of LCSH, its supplements, and local headings), name authority file, and series authority file and generate appropriate <u>see</u> and <u>see also</u> references as required for all specified outputs.

(9) It is the intent of the RLS to rely on the LC name authority file when it becomes available.

5.4 Quality Control

Because the RLS regards the problem of error control as a particular critical issue, the bidder will specify those hardware features, software techniques and operating procedures designed to detect and correct errors, paying particular attention to errors in data conversion, validation of converted data, reproduction and packaging quality.

5.5 Character Set

Bidder will describe on the Bidder Proposal Form his available character set. Bidder will state availability for input and publication of appropriate diacriticals related to foreign language entries.

5.6 Filing Rules

It is desirable that catalogs be filed according to the Library of Congress computerized filing rules. The bidder will specify all variations and exceptions made to these rules.

(1) All abbreviations are to be filed as if spelled out in full.

(2) All numerals are to be filed as if spelled out in full.

(3) Two-part names are to be filed together in a consistent manner.

(4) All author's names beginning with Mc and Mac shall be filed as Mac.

6. BIDDER PROPOSAL FORM

1. References: Libraries for whom vendor has produced micofiche and/or roll film catalogs within the last two years.

Library	Address	Contact Person	Telephone	Fiche (Note) Film
a.				
b.				
c.				
d.				
e.				
f.				
g.				
h.				
i.				
j.				
k.				

2. Number of titles in vendor's data base, both LC MARC and other MARC records. _____

3. Number of titles in (2) accessible by LC #. _____

4. Number of cross references in vendor's data base. _____

5. Annual revenues of company (gross). _____

6. Annual sales of COM catalogs (in dollars). _____

7. Size of staff committed to COM services. _____

8. Number of systems analysts/programmers. _____

9. Computer facilities owned (describe).

10. Other computer facilities available (describe).

11. Attach sample of microfiche and report printouts.

IX. NORTHWEST REGIONAL LIBRARY

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this section we have included relevant background data, conclusions and recommendations for the Northwest Regional Library. Our analysis of the alternatives is described in Sections I through IV.

BACKGROUND

Currently, Northwest maintains separate card files for the catalog, shelf list, and on-order files. There is not a separate locator file. Technical processing services are provided centrally. The region does not have any machine-readable records for these files. The union catalog maintained at Headquarters contains agency holdings added since 1978 and all Headquarters holdings.

There is a need to improve the quality and accessibility of the catalog to all members and branches in the region. Creation and maintenance of the library card catalog and its related manual files, i.e. the shelf list and on-order file, is labor-intensive and expensive. We also found that cost pressures have resulted in the quality of the current card catalogs to be relatively poor, reflecting inconsistent cataloging and a variety of catalog rules. There is a tendency for the quality of card catalogs to deteriorate over time, making it difficult for patrons to find what they want.

Northwest is seeking a cost-effective alternative to support the following objectives:

- Multiple access points to a regional union catalog with location entries in records from all members and branches;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

New forms of the catalog, maintained through machine-readable catalog records, offer substanstial service benefits and possible increases in efficiency, partly through improved quality and partly by providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A card catalog.
- A Computer Output Microform or COM catalog.
- An online catalog, supported by a computer and accessible through computer terminals.
- Some combination of the above.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) versus current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

CONCLUSIONS

As a result of this study we are recommending that the Northwest Regional Library convert to catalogs in machine-readable form by methods that provide a reasonable trade-off of cost and quality. The result of this effort will be a higher quality union catalog accessible to all members and branches.

Our cost analysis evaluated personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine-readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high. After the initial effort to convert the existing catalogs to machine-readable form, the personnel effort required to maintain the catalogs, and to use the catalogs, would be substantially reduced. The cost estimates and savings considered in this report only represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements or savings in using machine-readable catalogs.

Based upon our analysis we have reached the following conclusions for Northwest:

Catalog Form -

In our opinion, the best alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large agencies, with COM catalogs in the other branch libraries or agencies. However, we recommend that Northwest defer acquisition of an online catalog/locator system for several years and initially focus on developing a union COM catalog for the Region, due to the limited use of rotating collections in the region.

Current Cataloging -

The needs and priorities of the six regional library systems are best satisfied by current cataloging through OCLC, Inc. We rate MINI MARC next in terms of benefits. Cataloging through a COM vendor is rated third in terms of benefits. We recommend OCLC for Northwest because its initial costs are slightly lower and it provides some benefits of online access for the Headquarters staff that justify its annual costs.

Retrospective Conversion -

For regions such as Northwest using OCLC for current cataloging, we recommend OCLC for retrospective conversion. Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. However, If Northwest uses a COM vendor for current cataloging, we would recommend using MINI MARC for retrospective conversion.

RECOMMENDATIONS

While our review indicates that an online catalog/locator file would be most desirable for the Northwest Regional Library, we recommend that you initially plan on implementing a COM catalog while maintaining card shelf lists and on-order files. We also recommend OCLC for supporting retrospective conversion and cataloging. Additional discussion of the alternatives is given in Section IV.

Northwest Regional Library is in the same Minnesota multi-type region as three of the other regional libraries in this study and should continue to cooperate with these libraries in planning, converting and maintaining machine readable catalogs. We recommend the following approach for the Northwest Regional Library.

- Participate in the COM vendor evaluation and selection process with the other regional libraries.
- Plan on implementing a COM catalog for your regional library while maintaining card files for shelf lists and on-order file.
- Plan on performing retrospective conversion in a one-year effort using OCLC.
- Plan on performing current cataloging using OCLC. OCLC can also be used to supply cards for your shelf list and locator files.
- After the retrospective conversion is complete, the OCLC terminal can also be used by your headquarters for reference, ILL checking and pre-acquisition checking.
- If OCLC cannot accommodate satisfactorily your needs, use the COM vendor for retrospective conversion and current cataloging.

- In several years, review the option to join with the other libraries in your multi-type region to establish a shared online catalog and circulation control system. Use this system as a headquarters online catalog and locator file. Keep COM catalogs in the branches.

Cost estimates for the alternatives are given in the exhibit on page IX-14.

We estimate that Northwest will need the following amounts to support the effort based on your share of costs:

	Personnel	Non-Personnel	Total
First year costs of retrospective conversion	$21,000-$23,000	$11,000-$13,000	$32,000-$36,000
Additional annual costs to support a COM catalog	Staff effort reduced by .4 to .5 FTEs	$11,000-$12,000	$6,000-$7,000 Increase

REGIONAL CHARACTERISTICS

Headquarters: Thief River Falls Public Library

Primary population served (1970 census):	$ 50,136
Expenditures (FY 79):	
Materials	34,214
Total operating	241,889
Number of agencies:	
Branches	7
Bookmobiles	1
Materials (as of 12/31/79):	
Bookstock	96,936
Nonbook	3,377
Uncataloged	(252)
Cataloged	100,061

TECHNICAL SERVICES

Files

Public Catalog:

- Dictionary card file
- Maintained at HQ
- Includes all HQ holdings
- Includes agency holdings added since 1978
- Does not display location data
- Catalogs in 6 agencies include local holdings

Shelf List:

- Card file
- Maintained at HQ
- Includes all regional holdings except for retrospective holdings of newest member agency
- Displays location data
- Shelf lists in 6 agencies include local holdings

On-Order File:

- Copy of multi-part order form in title order

Other Files:

- Paperback shelf list
- Recordings public catalog
- Recordings shelf list
- Films listings

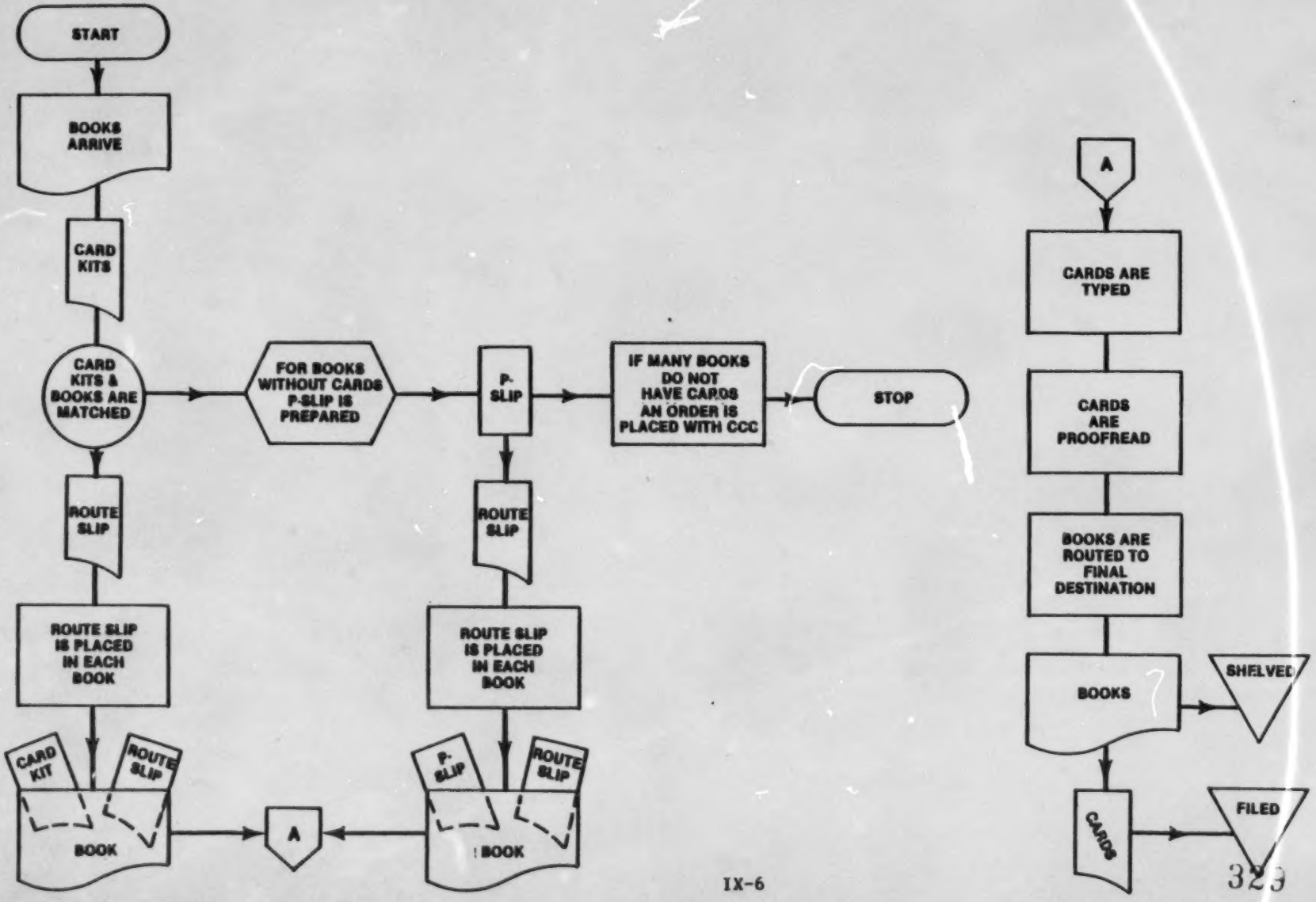
Acquisitions Process

- Selections are made by HQ
- Few titles are ordered for the agencies. Most titles are ordered for Thief River Falls collection and rotating collection
- Ordering/receiving are accomplished at HQ
- B&T is source for 90% of all orders.

Cataloging Process - see flowchart

- 85% of orders are received with cards
- Only when large orders are received at one time are cards ordered from CCC.

CATALOG STUDY ADVISORY GROUP
NORTHWEST REGIONAL LIBRARY
CATALOGING PROCEDURES



CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: Northwest Regional Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
o Volumes (or Units)	96,936		252	3,125			100,061	252
o Titles	N/A		141	N/A			N/A(1)	141
Added (during 1979)								
o Volumes (or Units)	2,357			18			2,375	
o Titles	N/A			N/A			N/A(2)	
Current Record								
o Cataloged	Yes		No	Yes				
o Form								
- Card	Yes			Yes				
- Book or List								
Current Source(s)								
o Catalog Record Content								
- Jobber	85%							
- Original (your staff)	15%							
- Other (please specify)								
o Catalog Cards								
- Jobber	85%							
- Your Staff	15%							
- Other (please specify)								

Notes:

(1) Estimated number of titles is 60,000 cataloged.

(2) Estimated 1,424 titles added annually.

CATALOG STUDY ADVISORY GROUP

Catalogs

Library or System: Northwest Regional Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	166	-	60	-	1	60,913	N/A	N/A	500
Branch/Member Catalogs	120	-	47	-	-	39,148	N/A	N/A	-
Totals	286	-	107	-	1	100,061	N/A	N/A	500

333

332

CATALOG STUDY ADVISORY GROUP

Manpower Requirements
(Full-time Equivalent Personnel)

Library or System: Northwest Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Central Services	2.0	1.0	-	2.20	1.0	6.20
Agencies	-	1.0	-	8.57	-	9.57
Total	2.0	2.0	-	10.77	1.0	15.77
Avg. Salary/Hour	$7.93(1)	$4.99	-	$3.75	$4.56	-
Benefits as % of Salary	14%	14%	-	14%	14%	
Avg. Salary + Benefits/Hour	$9.04	$5.69	-	$4.28	$5.20	

(1) Excludes Director

CATALOG STUDY ADVISORY GROUP

Manpower Requirements for Cataloging
(Full-time Equivalent Personnel)

Library or System: Northwest Regional Library

	Librarians		Technical Assistants	Clerical	Other	Total
	MLS	BA/BS				
Cataloging	0.10	-	-	0.36	0.02	0.48
Catalog Maintenance	-	-	-	0.05	0.04	0.09
Locator File Maintenance	-	-	-	-	-	-
Shelf List Maintenance	-	-	-	-	0.01	0.01
On-Order File Maintenance	-	-	-	-	0.03	0.03
Total	0.10	-	-	0.41	0.10	0.61

CATALOG STUDY ADVISORY GROUP

1979
Supplies and Services Cost Detail
Cataloging and Auxiliary Files

Library or System: Northwest Regional Library

Vendor Name	Description of Supplies or Services	Amount
1. Demco	Catalog cards	$ 36.00
2. Jostens	Catalog cards	44.00
3. Demco	Book order forms	270.00
4. Baker & Taylor	Catalog card kits	493.00
	Total	$843.00

CATALOG STUDY ADVISORY GROUP

1979
Annual Cataloging Costs Summary

Library or System: Northwest Regional Library

	Equipment (Rental or Depreciation)	Supplies	Services	Personnel	Total	Cost Per Volume
Cataloging		$350	$493	$5,304	$6,147	
Catalog Maintenance - Union Catalog - Branch Catalogs				877	877	
Locator File Maintenance				-	-	
Shelf List Maintenance				109	109	
On-Order File Maintenance				322	322	
Total	-	$350	$493	$6,612	$7,455	$3.14

Estimated Personnel Time and Cost for Each Alternative

Library or System: Northwest (Total)

	Est. Cost per FTE-HR	Present Method		Online System		Com Vendor		OCLC, Inc.		Mini-Marc	
		FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Catalog and File Maintenance											
Librarian - MLS	9.04	-	-	-	-	-	-				
- BA/BS	5.69	-	-	-	-	-	-				
Technical Assistant	-	-	-	-	-	-	-				
Clerical	4.28	.05	445	-	-	-	-				
Other	5.20	.08	865	.03	324	.03	324				
Total		.13	1,310	.03	324	.03	324				
Current Cataloging											
Librarian - MLS		.10	1,880			.01	188	.01	188	.01	188
- BA/BS		-	-			-	-	-	-	-	-
Technical Assistant		-	-			-	-	-	-	-	-
Clerical		.36	3,206			.06	534	.07	623	.04	356
Other		.02	218			-	-	-	-	-	-
Total		.48	5,304			.07	722	.08	811	.05	544
Retrospective Conversion											
Librarian - MLS						-	-	-	-	-	-
- BA/BS						.40	4,734	.30	3,551	.30	3,551
Technical Assistant						-	-	-	-	-	-
Clerical						.40	3,561	-	2,671	-	-
Other						1.30	14,061	1.40	15,142	1.10	11,898
Total						2.10	22,356	2.00	21,364	1.40	15,449

Comparison of Total Estimated Costs

Library or System: Northwest

	Present Method	Online Catalog(2)	COM Vendor(3)	OCLC and COM(4)	MINI MARC and COM(5)	MINI MARC (Retro only) and COM(5)	Online Hdqtr COM Branches(6)	Online Hdqtrs COM Branches and OCLC(7)	Online Hdqtrs COM Branches MINI MARC(8)
				Initial Costs					
Catalog and File Maintenance									
Initial costs		$ 255,900	6,600	6,600	6,600	6,600	112,650	112,650	112,650
Five years of annual costs:									
- Non-personnel	$ -	150,650	38,120	38,120	38,120	38,120	87,870	87,870	87,870
- Personnel(10)	6,550	1,620	1,620	1,620	1,620	1,620	1,620	1,620	1,620
Total	6,350	408,170	46,340	46,340	46,340	46,340	202,140	202,140	202,140
Current Cataloging									
Initial costs			7,350	3,498	45,050	7,350	7,350	3,498	7,350
Five years of annual costs:									
- Non-personnel	4,215		1,960	22,815	45,250	1,960	1,960	22,815	1.960
- Personnel(10)	26,520		3,610	4,055	2,720	3,610	3,610	4,055	3,610
Total	30,735	(9)	12,920	30,368	93,020	12,920	12,920	30,368	12,920
Retrospective Conversion									
Initial costs									
- Non-personnel			22,450	10,628	23,700	23,700	22,450	10,628	23,700
- Personnel(10)			22,536	21,364	15,449	15,449	22,536	21,364	15,449
Total		(9)	44,986	31,992	39,149	39,149	44,986	31,992	39,149
Combined Net Cost(1)									
Initial costs:									
- Non-personnel	-		15,700	14,768	51,700	37,650	121,750	120,818	143,700
- Personnel(10)	-		22,536	21,364	15,449	15,449	22,536	21,364	15,449
Five years of annual costs:									
- Non-personnel	4,215		39,430	61,025	83,370	39,430	89,180	110,685	89,180
- Personnel(10)	33,070		5,230	5,675	4,340	5,230	5,230	5,685	5,230
Total Five Years	37,285	(9)	82,896	102,832	154,859	97,759	238,696	258,542	253,559
Average Per Year - Initial & Annual	7,457		16,579	20,566	30,972	19,552	47,739	51,708	50,71?
Average Annual Costs	7,457		8,932	13,340	17,572	8,932	18,882	23,272	18,882
Initial Costs	-		38,236	36,132	67,149	53,099	144,286	142,182	159,149

Note:

(1) Consideration of discounts, operating efficiencies, processing steps required or avoided makes Net Cost less than a simple total.
(2) Source of data: Exhibit II-3.
(3) Source of data: Exhibit II-5.
(4) Source of data: Exhibit II-8.
(5) Source of data: Exhibit II-11.
(6) Source of data: Exhibit II-13.
(7) Source of data: Exhibits II-3, II-8, and II-13.
(8) Source of data: Exhibits II-3, II-11 and II-13.
(9) Choice of cataloging method and source is left to the region; costs vary accordingly.
(10) Source of Data: Exhibit III-4.

X. LAKE AGASSIZ REGIONAL LIBRARY

Peat, Marwick, Mitchell & Co. is pleased to present our final report for the Cooperative Catalog Conversion Study. In this section we have included relevant background data, conclusions and recommendations for the Lake Agassiz Regional Library. Our analysis of the alternatives is described in Sections I through IV.

BACKGROUND

Currently, Lake Agassiz maintains separate card files for the catalog, shelf list, on-order and locator files. Technical processing services are provided centrally. The region does not have any machine-readable records for these files. Headquarters has a union catalog including all regional holdings except for pre-1977 Polk County. The branches do not have regional union catalogs.

There is a need to improve the quality and accessibility of the catalog to all agencies and branches in the region. Creation and maintenance of the library card catalog and its related manual files, i.e. the shelf list, locator file and on-order file, is labor-intensive and expensive. We also found that cost pressures have resulted in the quality of the current card catalogs being compromised, reflecting inconsistent cataloging and a variety of catalog rules. There is a tendency for the quality of card catalogs to deteriorate over time, making it difficult for patrons to find what they want.

Lake Agassiz is seeking a cost-effective alternative to support the following objectives:

- Multiple access points to a regional union catalog with location entries in records from all members and branches;
- Catalogs immediately updated, including items on order; and
- Catalogs compatible and linkable with catalogs in other libraries, including other types of libraries.

New forms of the catalog, maintained through machine-readable catalog records, offer substantial service benefits and possible increases in efficiency, partly through improved quality and partly by providing access to a region-wide union catalog in every branch library or agency. Possible alternative catalogs include:

- A card catalog.
- A Computer Output Microform or COM catalog.
- An online catalog, supported by a computer and accessible through computer terminals.
- Some combination of the above.

The objectives of the Cooperative Catalog Conversion Study were:

- To explore existing online bibliographic utilities and off-line vendors in order to determine the most appropriate and cost-effective method for catalog conversion for each regional library for:

  (i) retrospective holdings, and
  (ii) current material purchases;

- To evaluate the costs for each library system of each catalog alternative (online, COM and card forms) versus current costs for initial conversion and for continued maintenance of the catalog; and

- To plan for the conversion of bibliographic records to machine-readable form for the purposes of equal access from all locations to the materials held in each individual region.

CONCLUSIONS

As a result of this study we are recommending that the Lake Agassiz Regional Library convert to catalogs in machine-readable form by methods that provide a reasonable trade-off of cost and quality. The result of this effort will be a higher quality union catalog accessible to all members and branches.

Our cost analysis evaluated personnel and non-personnel costs. Current non-personnel costs are relatively low and cover such items as card kits, card stock, order forms, copy machines, typewriters and supplies. Machine readable catalogs entail substantial increases in non-personnel costs for items such as computer equipment, software, terminals, supplies, telecommunications, maintenance and cataloging services. Current personnel costs are relatively high. After the initial effort to convert the existing catalogs to machine-readable form, the personnel effort required to maintain the catalogs, and to use the catalogs, would be substantially reduced. The cost estimates and savings considered in this report only represent the value of staff time, based upon their average salary and fringe benefits, required to maintain the catalog and related files. We did not place a dollar value on service improvements or savings in using machine-readable catalogs.

Based upon our analysis we have reached the following conclusions for Lake Agassiz.

Catalog Form -

In our opinion, the best alternative form for these regions is a combination of an online catalog/locator system serving headquarters and large agencies, with COM catalogs in the other branch libraries or agencies. We recommend that Lake Agassiz acquire an online catalog/locator system as soon as possible after developing a union COM catalog for the Region.

Current Cataloging -

The needs and priorities of the six regional library systems are best satisfied by current cataloging through OCLC, Inc. We rate MINI MARC next in terms of benefits. Cataloging through a COM vendor is rated third in terms of benefits, but its low cost makes it appropriate for some of the regions. We recommend it for Lake Agassiz because of its lower cost and because the online catalog/locator system will provide some of the same benefits as OCLC to the Headquarters staff.

Retrospective Conversion -

Recent changes in prices and features have made OCLC, Inc. and MINI MARC comparable as retrospective conversion options for these regional libraries. For regions using OCLC for current cataloging, we recommend OCLC for retrospective conversion. If Lake Agassiz uses a COM vendor for current cataloging, we recommend using MINI MARC for retrospective conversion. While retrospective conversion is in progress MINI MARC can also be used for current cataloging.

RECOMMENDATIONS

Based upon our study, we conclude that the most attractive alternative for Lake Agassiz Regional Library is an online catalog/locator file for staffing headquarters and principle agencies combined with COM catalogs for public access in all branches. We recommend that you begin retrospective conversion using MINI MARC while maintaining the card catalog, shelf list, locator and on-order files. Either system can supply cards for these files. Once the online and COM catalogs are established, continue current cataloging through the COM vendor. Additional discussion of the alternatives is given in Section IV.

We recommend that you continue to work with others in your Minnesota Multi Type Region and explore opportunities for cooperative efforts, such as a shared computer system, once your retrospective conversion is initiated.

Retrospective conversion will take a year or longer. There is no need to purchase an online catalog/locator system until the conversion is nearly complete. During this time you will be able to plan for funding, selection and installation of the system and COM catalog.

Cost estimates for the alternatives are presented in the exhibit on page X-14.

We estimate that Lake Agassiz will need the following amounts to support the effort based on your share of costs:

	Personnel	Non-Personnel	Total
First year costs of retrospective conversion	$17,000-$19,000	$24,000-$26,000	$41,000-$45,000
Second year initial costs of COM catalog and computer system	-	$130,000-$140,000	$130,000-$140,000
Additional annual costs to support a COM catalog and online catalog (without OCLC)	Staff effort reduced by 1.1 to 1.2 FTEs	$24,000-$26,000	$9,000-$11,000 Increase

REGIONAL CHARACTERISTICS

Headquarters: Moorhead Public Library	
Primary population served (1970 census):	112,016
Expenditures (FY 79):	
Materials	$149,414
Total operating	$674,676
Number of agencies:	
Branches	8
Reading Centers	3
Bookmobiles	3
Materials (as of 12/31/79):	
Bookstock	215,499
Nonbook	7,739
Uncataloged	(470)
Cataloged	222,768

Comment:

- o System is divided into the southern region centered in Moorhead and the northern region, consisting of Polk County, centered in Crookston. Polk County libraries joined LARL in 1975 and continue to exercise a certain degree of autonomy.

TECHNICAL SERVICES

Files

Public Catalog:

- Divided card file
- Maintained at HQ
- Includes all post-1977 holdings of region
- Includes all pre-1977 holdings except for Polk County
- Does not display location data
- Crookston public catalog includes all Polk County agencies' holdings.

Shelf List:

- Card file
- Maintained at HQ
- Includes same holdings as public catalog
- Displays location data

On-Order/In-Process File:

- Copy of multi-part order form in title order
- Includes all books ordered by HQ

Other Files:

- Recordings Shelf List
- Large Print List in public catalog
- Green card file to control rotating shelf books

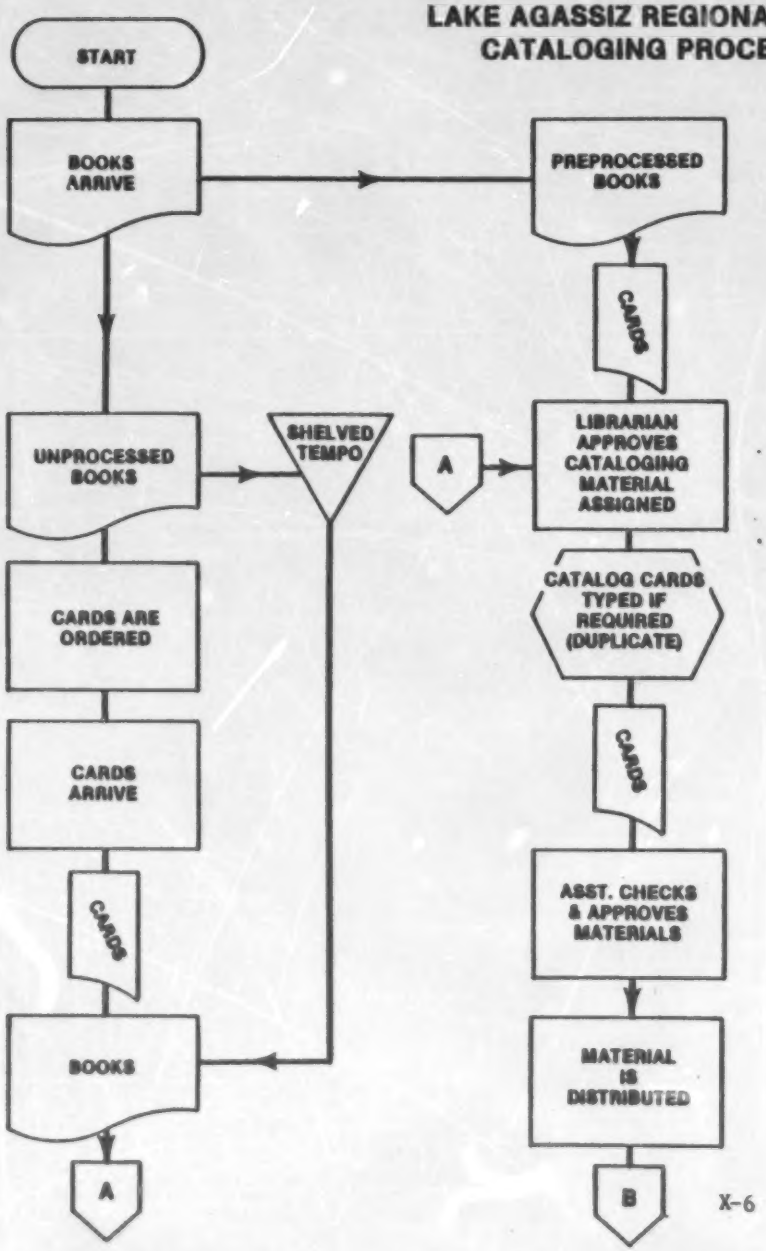
Acquisitions Process

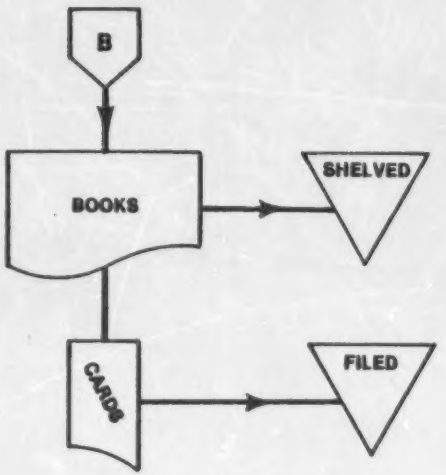
- Selections for Polk County agencies are made by Crookston personnel
- Polk County orders are processed by HQ
- Selections for southern region are made by HQ personnel with input from larger agencies.

Cataloging Process - see flowchart

- Nearly all juvenile titles and approximately 75% of adult titles are received with catalog cards
- Whenever possible cards are ordered from CCC for books received without cataloging.

CATALOG STUDY ADVISORY GROUP
LAKE AGASSIZ REGIONAL LIBRARY
CATALOGING PROCEDURES





CATALOG STUDY ADVISORY GROUP

Catalog Records

Library or System: Lake Agassiz Regional Library

	Material Type						Total	
	Book	Serials	Film	Sound Recordings	Documents	Maps	Cataloged	Uncataloged
Held (as of 12/31/79)								
o Volumes (or Units)	215,499	N/A	470	7,269			222,768	470
o Titles	N/A	300	57	N/A			N/A	N/A
Added (during 1979)								
o Volumes (or Units)	16,342		85	2,126			18,468	85
o Titles	N/A		N/A	N/A			N/A	N/A
Current Record								
o Cataloged	Yes	No	No	Yes				
o Form								
- Card	Yes	Yes		Yes				
- Book or List								
Current Source(s)								
o Catalog Record Content								
- Jobber	75%			No				
- Original (your staff)	5%			Yes				
- Other (please specify)	20%			No				
o Catalog Cards								
- Jobber	75%			No				
- Your Staff	5%			Yes				
- Other (please specify)	20%			No				

CATALOG STUDY ADVISORY GROUP

Catalogs

Library or System: Lake Agassiz Regional Library

	Estimated Number of Card Drawers In use					Cataloged		On Order	
	Dictionary	Divided	Shelf List	Locator File	On order File	Volumes	Titles	Volumes	Titles
Library or System Union Catalog(s)	90	204	90	-	12	93,000	N/A	N/A	N/A
Branch/Member Catalogs	285	-	35	-	-	121,800	N/A	-	-
Totals	375	204	125	-	12	222,768[1]	N/A	N/A	N/A

Note

1) Total from questionnaire response, page 5.